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UNIVERSITY OF ALBERTA

INTERPERSONAL LEARNING IN SHORT-TERM INTEGRATED GROUP PSYCHOTHERAPY

BY

CARLA J. BLAINE

A thesis submitted to the Faculty of Graduate Studies and Research
in partial fulfillment of the requirements for the degree of

MASTER OF EDUCATION.

IN

COUNSELLING PSYCHOLOGY

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

EDMONTON, ALBERTA

FALL 1993

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled INTERPERSONAL LEARNING IN SHORT-TERM INTEGRATED GROUP PSYCHOTHERAPY submitted by CARLA J. BLAINE in partial fulfillment of the requirements for the degree of MASTER OF EDUCATION in COUNSELLING PSYCHOLOGY.

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June 29/93

TO BRUNO LONGO

ABSTRACT

This empirical examination investigated the issues of integration within the context of group therapy. Nine adults - four of whom reported possession of a diagnoses of developmental handicap and five who did not were in group therapy together for eight and one half weeks (two sessions each week). Significant results were obtained on two of the three outcome measures (the Brief Symptom Inventory, Derogatis, 1982 and Target Goals - Group Member, MacKenzie, 1990). The differences were independent of the diagnosis of developmental disability. Thus it would appear that both categories of group membership benefited from therapy. Within the repeated measures analysis on the Group Climate Questionnaire - Short Form (GCQ, MacKenzie, 1990) significant results were also obtained. Significant linear trends were evident in the analyses of the Engaged and Conflict (GCQ) scores and a significant quadratic trend was found for the Engaged score. Graphical analyses of the repeated measures observations of the Hill Interaction Matrix - Group Form (HIM-G, Hill, 1969) categories show a trend. These trends generally support the observation that the group moved from: Pre-Work to Work, Non-member-centred to Member-centred, and less personal risk to more risk over time. Post hoc data analysis suggests that subjects who reported possession of a diagnosis of developmental disability demonstrated a higher mean incidence of most therapeutic factors.

Furthermore, it appears that the group progressed through the developmental stages described by MacKenzie and Livesley (1983). The results and observations described within this study support the hypothesis that integrated groups containing the developmentally disabled are viable.

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TABLE OF CONTENTS

Page

CHAPTER I

INTRODUCTION 1

Definitions 6

CHAPTER II

REVIEW OF THE LITERATURE 13

Rationale 34

Hypotheses 35

CHAPTER III

METHOD 42

Subject Demographic Characteristics 42

Procedure 46

Subject Recruitment 46

Treatment 52

Instruments 64

The Brief Symptom Inventory (BSI) 68

The Social Adjustment Scale - Self Report (SAS-SR) 73

Target Goals 76

The Group Climate Questionnaire (GCQ) 79

The Hill Interaction Matrix - Group Form (HIM-G) 82

Recording Procedures 90

Outcome Measures 92

Process Measures 95

TABLE OF CONTENTS (continued)

Page

Process measure evaluations by group members and therapists.................................. 95

Process measure evaluations by observer-raters... 97

Settings.. 101

Analyses of Data.................................. 102

CHAPTER IV

RESULTS.. 106

Organization of the Chapter........................ 106

Outcome Results.................................... 106

BSI Data Analyses.................................. 106

SAS-SR Data Analyses............................... 123

Target Goals Data Analyses......................... 132

Interrater Reliability of Process Instrumentations....... 142

Process Results.................................... 146

GCQ Data Analyses.................................. 146

HIM-G Data Analyses................................ 173

Correlational Analyses............................. 191

Exploring Therapeutic Efficacy..................... 196

Count of Therapeutic Factors....................... 196

Therapeutic Themes................................. 219

CHAPTER IV

DISCUSSION... 224

TABLE OF CONTENTS (continued)

Page

Limitations... 224

General Limitations............................... 224

Specific Outcome Analyses Limitations................. 229

Specific Process Analysis Limitations................. 231

Specific Post Hoc Exploration Limitations............. 234

Implications.. 234

Specific Outcome Analyses Implications................ 235

Suggested Further Research........................ 236

Specific Process Analyses Implications................ 240

Group Climate Questionnaire (GCQ).................. 240

Hill Interaction Matrix - Group Form (HIM-G)....... 244

Suggested Further Research........................ 248

Implications for Clinical Practice and Counsellor Preparation.................................. 250

Specific Therapeutic Efficacy Analyses Implications... 252

Therapeutic Factor Count.......................... 253

Therapeutic Themes................................ 256

Suggested Further Research........................ 265

Conclusions... 267

REFERENCES... 274

APPENDICES... 287

A. Consent to Participate in a Research Study............ 287

TABLE OF CONTENTS (continued)

Page

B. Consent to Testing for Research Purposes............... 288

C. Consent for Video Taping of Group Session for Research Purposes...................................... 289

D. *Figure D-1*. Percentile and median differences in a box and whisker plot for the BSI scores of Somatization, Obsessive-compulsive, Interpersonal Sensitivity and Depression with Psychiatric Outpatient Norms.................. 290

E. *Figure E-1*. Percentile and median differences in a box and whisker plot for the BSI scores of Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation and Psychoticism with Psychiatric Outpatient Norms.. 291

F. *Figure F-1*. Percentile and median differences in a box and whisker plot for the BSI scores of the General Severity Index, the Positive Symptom Total and the Positive Symptom Distress Index with Psyciatric Outpatient Norms............................. 292

G. *Figure G-1*. Percentile and median differences in box and whisker plots for the SAS-SR scores of Work, Economic, Social and Leisure, Extended Family and Overall Adjustment Score with Community Sample Norms................................ 293

TABLE OF CONTENTS (continued)

Page

H. GCQ 'Engaged' Rating Scores 294

I. GCQ 'Conflict' Rating Scores 295

J. GCQ 'Avoiding' Rating Scores 296

K. Absenteeism of Group Members in Therapy Sessions 297

L. Summary of Co-therapy Evaluation 298

LIST OF TABLES

TABLE Page

1. Demographic Characteristics of the Sample (N = 9)........ 43

2. Reported Medications During Group Sessions (October 2 to November 27).................... 45

3. Score Means and Standard Deviations Calculated from HIM Reference Data............................ 89

4. Outcome Measures Research Design....................... 91

5. Process Measures Research Design: Group Climate Questionnaire (GCQ)........................... 91

6. Process Measures Research Design: Hill Interaction Matrix - Group Form (HIM-G).................... 92

7. BSI Means and Standard Deviations for Subjects Who Did and Who Did Not Report Possession of a Diagnosis of Developmental Disability................... 108

8. Two-factor Repeated Measures Anova: Five BSI Scores............................... 115

9. Two-factor Repeated Measures Anova: Four BSI Scores............................... 116

10. Two-factor Repeated Measures Anova: BSI Global Scores............................. 117

11. BSI Pretest, Posttest, and Psychiatric Outpatient Norms Means and Standard Deviations............ 120

LIST OF TABLES (continued)

TABLE Page

12. BSI Pretest and Posttest Scores compared to Psychiatric Outpatient Norms with z-tests........ 121
13. SAS-SR Means and Standard Deviations for Subjects Who Did and Did Not Report Possession of a Diagnosis of Developmental Disability..................... 125
14. SAS-SR: Anova for a Two-factor Repeated Measures Design.. 128
15. SAS-SR Pretest, Posttest Scores and Community Sample Norms Means and Standard Deviations............. 130
16. SAS-SR Pretest and Posttest Scores Compared to Community Sample Norms with z-tests............. 131
17. Target Goal Types Given by Group Members Who Did and Did Not Report Possession of a Diagnosis of Developmental Disability........................ 135
18. Interpersonal Target Goal Ratings...................... 136
19. Target Goal Means and Standard Deviations for Subjects Who Did and Did Not Report Possession of a Diagnosis of Developmental Disability........... 136
20. Target Goals: Anova for a Two-factor Repeated Measures Design................................ 138
21. GCQ Inter-rater Reliability Estimates.................. 143
22. HIM-G Inter-rater Reliability Estimates................ 146

LIST OF TABLES (continued)

TABLE Page

23. GCQ Rating Means and Standard Deviations: All Raters Together and Therapists/Outside Observers........ 149

24. GCQ Rating Means and Standard Deviations: Group Members.................................. 150

25. GCQ Repeated Measures One-way Anova: All Raters (n = 10)............................ 158

26. GCQ Repeated Measures One-way Anova: All Group Members (n = 6)....................... 159

27. GCQ Repeated Measures One-way Anova: Group Members Who Did Report Possession of a Diagnosis of Developmental Disability (n = 3)................ 160

28. GCQ Repeated Measures One-way Anova: Group Members Who Did Not Report Possession of a Diagnosis of Developmental Disability (n = 3)................ 161

29. GCQ Repeated Measures One-way Anova: Therapists and Outside Observers (n = 4)....................... 162

30. GCQ Repeated Measures One-way Anova: Therapists (n = 2)............................. 163

31. GCQ Repeated Measures One-way Anova: Outside Observers (n = 2)....................... 164

32. GCQ Engagement Score Trend Analysis.................... 168

33. GCQ Conflict Score Time Main Effect Trend Analysis...... 171

LIST OF TABLES (continued)

TABLE Page

34. GCQ Avoiding Score Time Main Effect Trend Analysis...... 172

35. HIM-G Means and Standard Deviations for Five Group Sessions: Content/Style, Work/Style, Quadrant/Style.................................. 175

36. HIM-G Means and Standard Deviations for Five Group Sessions: Therapist Activity, Risk Ratio and Intra-Group Ratio.............................. 184

37. HIM-G Scores Compared to Reference Data with z-tests: Five Groups...................................... 189

38. Examples of Correlation Patterns Which Have a Downward Trend in Absolute Value Over Time....... 194

39. Examples of Correlation Patterns Which Have an Upward Trend in Absolute Value Over Time......... 195

40. Count of Therapeutic Factors in Order of Greatest Total Incidence................................ 204-205

41. Means and Standard Deviations of Each Factor's Incidence in Order From Greatest Incidence to Least Incidence............................. 206

42. Group Themes, Affect, Defenses, Conflicts, Compromises and/or Resolutions.................. 220-223

LIST OF TABLES (continued)

TABLE Page

43. Summary of Hypotheses (DD = diagnosis of developmental disability reported, ND = no diagnosis reported). 267-269

LIST OF FIGURES

FIGURE page

1. BSI Somatization mean pretest and posttest score comparison.................................... 109

2. BSI Obsessive-compulsive mean pretest and posttest score comparison................................ 109

3. BSI Interpersonal Sensitivity mean pretest and posttest score comparison................................ 110

4. BSI Depression mean pretest and posttest score comparison.................................... 110

5. BSI Anxiety mean pretest and posttest score comparison.................................... 111

6. BSI Hostility mean pretest and posttest score comparison.................................... 111

7. BSI Phobic Anxiety mean pretest and posttest score comparison.................................... 112

8. BSI Paranoid Ideation mean pretest and posttest score comparison.................................... 112

9. BSI Psychoticism mean pretest and posttest score comparison.................................... 113

10. BSI General Severity Index mean pretest and posttest score comparison.............................. 113

11. BSI Positive Symtom Distress Index mean pretest and posttest score comparison...................... 114

LIST OF FIGURES (Continued)

FIGURE page

12. BSI Positive Symptom Total mean pretest and posttest score comparison.............................. 114

13. SAS-SR Work score pretest and posttest mean comparison.................................... 125

14. SAS-SR Social and Leisure score pretest and posttest mean comparison................................ 126

15. SAS-SR Extended Family score pretest and posttest mean comparison................................ 126

16. SAS-SR Economic score pretest and posttest mean comparison.................................... 127

17. SAS-SR Overall Adjustment score pretest and posttest mean comparison................................ 127

18. Target Goals mean score comparisons: Expectations, Achievement at mid-point and Achievement at end-point of therapy........................... 137

19. Percentile and median differences in a box and whisker plot for the Target Goals Achievement rating scores... 140

20. GCQ scores mean comparisons over four rated group sessions: all raters (n = 10).................... 151

21. GCQ scores mean comparisons over five rated group sessions: therapists and observers (n = 4)........ 151

LIST OF FIGURES (Continued)

FIGURE page

22. GCQ scores mean comparisons over four rated group sessions: group members who reported possession of developmental disability (n = 3).................. 152

23. GCQ scores mean comparisons over four rated group sessions: group members who did not report possession of developmental disability (n = 3).... 152

24. GCQ scores mean comparisons over four rated group sessions: all group members (n = 6)............... 153

25. Percentile and median differences in box and whisker plots for the GCQ Engaged score for different rater groupings over time.............................. 154

26. Percentile and median differences in box and whisker plots for the GCQ Conflict score for different rater groupings over time.............................. 155

27. Percentile and median differences in box and whisker plots for the GCQ Avoiding score for different rater groupings over time.............................. 156

28. Reference data percentile equivalents for Content/Style HIM-G mean scores over five group therapy sessions................................ 176

29. Reference data percentile equivalents for Work/Style HIM-G scores over five therapy sessions.......... 177

LIST OF FIGURES (Continued)

FIGURE page

30. Reference data percentile equivalents for Quadrant/Style HIM-G mean scores over five group therapy sessions.................................. 178

31. Comparison of Therapist Activity, Intra-Group Ratio and Risk Ratio mean scores over five group sessions.. 186

32. Reference data percentile equivalents for Therapist Activity mean scores over five group therapy sessions.. 187

33. Correlation matrix of summary scores over time.......... 193

34. Rank order line graph of the mean incidences of therapeutic factors across all group sessions for those who did and did not report possession of a diagnosis of developmental disability............ 208

35. Count of Therapeutic Factor 1: Cohesion/Acceptance....... 210

36. Count of Therapeutic Factor 2: Universality............. 210

37. Count of Therapeutic Factor 3: Altruism................. 211

38. Count of Therapeutic Factor 4: Installation of Hope...... 211

39. Count of Therapeutic Factor 5: Guidance................. 212

40. Count of Therapeutic Factor 6: Vicarious Learning........ 212

41. Count of Therapeutic Factor 7: Self-understanding........ 213

LIST OF FIGURES (Continued)

FIGURE page

42. Count of Therapeutic Factor 8: Learning Through Interpersonal Action............................ 213

43. Count of Therapeutic Factor 9: Self-disclosure.......... 214

44. Count of Therapeutic Factor 10: Catharsis............... 214

45. Count of Therapeutic Factor 11: Corrective Recapitulation of the Primary Family............ 215

46. Count of Therapeutic Factor 12: Existential Factors..... 215

47. Count of Therapeutic Factor 13: Imparting of Information.................................... 216

48. Count of Therapeutic Factor 14: Development of Social Skills................................. 216

CHAPTER I

INTRODUCTION

Often the possession of a psychiatric and/or physical medical diagnosis induces separation from society. A diagnosis of developmental handicap provokes such isolation. The labelled people are not the only ones who are isolated. The rest of society is isolated as well.

When one is given a diagnosis of developmental disability, it is assumed that one cannot function in an integrated society, let alone within a therapeutic environment (Johnson, 1971; Paniagua & De Fazio, 1983; Schneider, 1986; Shapiro, 1979; Sternlicht, 1966). This study examines the explicit and implicit assumptions and myths about one's abilities to function in society with a diagnosis of developmental disability using the group therapy milieu. However, it is hoped that the impact of this study will extend beyond the confines of therapy.

It is the author's belief that the concept of integration has, throughout history, been attached with fear, ignorance, persecution, resistance and change. Many groups of people have experienced various forms of integration into different societies: those who the Romans conquered; Irish immigrants to North America in the 1800's; Africans who came to North America as slaves; Indigenous North Americans; people diagnosed with mental illnesses; those diagnosed with developmental disabilities; and many others too numerous to mention here.

This author believes that the word 'integration' conjures images of those who are integrated. To 'be integrated' in today's society usually implies to have integration imposed by some authority. The integrated one is generally powerless.

The author holds the opinion that to 'integrate' implies empowerment. The variable of control of one's integration subsumes ability, power, competency, and strength which, perhaps, in many cases enhances an aspect of fear in the receiving society. This fear can result in persecution of and resistance to the people who are attempting to integrate. Many minority groups have experienced these results of fear in their journeys towards integration and acceptance in society.

Small pockets of society are recognizing another meaning of integration: that of bringing together parts to make a whole. The author suggests that this idea recognizes that the 'parts' already exist in society, and the act of 'bringing them together' simply enhances the whole through the interactions of all of the individual assets. In the United States and Canada integration of the developmentally disabled involves a significant population. For example there are now at least 2 325 000 disabled people living in Canada (Wight-Felske, 1984) and nearly 4 million people in the United States who have been diagnosed with developmental disabilities (National Institutes of Health Consensus Development, 1989). In the DSM-III-R it is stated that approximately one percent of the population can be defined under their Axis II designation of 'Mental Retardation' (American Psychiatric Association, [APA], 1987).

It is the author's hypothesis that each part (or group of people) has contributions to make in society. Everyone can benefit (if they are willing) from all of these contributions. Each contribution is different and immensely valuable to every individual. It seems, that in order for a mutually agreeable integration to work, all parties must see each other as equals.

Examples of pockets of society that are beginning to recognize and benefit from a mutually agreeable integration are: kibbutzim, community schools, community associations, multi-cultural associations, group therapy programs, support groups, L'Arche communities, the changing European Community, and the growth of a global community. These examples potentially mark the beginning of a new social order.

Whether or not the experiences of integration are positive, integration is occurring for those with diagnoses of developmental disabilities locally, nationally and internationally. Many authors put forth that the process of integration causes much stress for those with a diagnosis of developmental disability (Matson, 1984; Nirje, 1980; Panaigua & De Fazio, 1983; Selan, 1976; Szivos & Griffiths, 1990; and Tajfel, 1981). Other authors assert that those with a diagnosis of developmental disability have a greater propensity for emotional difficulties than those without such a diagnosis (APA, 1987; Matson, 1984; Monfils & Menolascino, 1983; Panaigua & De Fazio, 1983; Robinson & Robinson, 1985; Selan, 1976; Solnit & Stark, 1977; Szymanski & Croker, 1985). Still other authors report that adequate psychological services are not being provided to those with a diagnosis of developmental disability (Albin, 1992; Mansell, Sobsey & Calder, 1992; Pfadt, 1991; Sobsey, 1988; Sullivan & Scanlan, 1987).

Denying the developmentally disabled the psychological services for which they have greater need seems illogical and punitive. Indeed this exclusion provides the motivation for this investigation. If support can demonstrate that integrated group therapy can be successful, then the subject may promote further study and general therapeutic acceptance.

There appears to be conflict between the diagnosing of someone with a developmental disability and social role valorization. People become devalued when diagnosed with a developmental disability. Social role valorization enables previously devalued people to be culturally valued in society

(Banks-Mikkelson, 1980; Nirje, 1980; Wolfensberger, 1980) via numerous pathways. Some of these paths have to do with changing society's attitudes towards people in general, others are more specific such as promoting the participation in society of people who are devalued in community agencies and associations, leisure activities, social contacts, educational and vocational pursuits, and in daily routines. These things can be done so that people who have suffered a devaluing in society can join the general population in a normal and an acceptable way, and so that all people can be valued for their contributions. Psychological services could help people diagnosed with developmental handicaps to increase their social value through aiding them in joining society.

It is the opinion of the author that the devaluing of individuals is not limited to excluding particular people from active participation in society. It also has to do with arbitrarily limiting the scope of people with whom one can have contact. Social contact with people who have been diagnosed with developmental disabilities is denied and often prohibited by social systems. It is hoped that the current study will begin to open up the avenues of contact for the benefit of all.

It is also hoped that the present study will make a small contribution to the forwarding of a mutual integration. It seems that one must demonstrate that the people diagnosed with a developmental disability have contributions to make in society and that others can receive benefit from these contributions. It is the author's contention that this need for such a demonstration is based upon fear and ignorance.

One area in which evidence of societal contribution can be found as well as a demonstration of successful mutual integration is in an integrated therapeutic group in which all members have freely chosen to participate. There is much to be learned from experiencing and evaluating such a group which has to do with: psychological processes, group processes, therapeutic factors, differences and similarities between the two groups of people involved in the therapy, and therapeutic benefit.

Definitions

The term 'developmental disability', referred to in this study has varying meanings within the literature. Definitions of independent and dependent variables within this particular study are also necessary. In order to further the understanding of the usage of terms within the study, as well as the focus and content of the research, the following definitions are offered.

1. Developmental Disability. The formal definition of the diagnosis of developmental disability as referred to in the present study is given under the label of 'Mental Retardation' (Axis II) on page 28 of the DSM-III-R (APA, 1987). The DSM-III-R makes divisions in defined degrees of severity of the diagnosis: borderline, mild, moderate, severe, profound, and unspecified. The DSM-III-R defines essential features of the diagnosis as: "(1) significantly subaverage general intellectual functioning, accompanied by (2) significant deficits or impairments in adaptive functioning, with (3) onset before the age of 18" (APA, 1987, p. 28).

General intellectual functioning is defined in the DSM-III-R as intelligence quotient (IQ) assessment(s) results observed to be in a band of 65 to 75, with flexibility involved regarding inclusion into the definition if an IQ is somewhat higher than 70 but there are significant deficits in adaptive functioning - or exclusion from the category if a person's IQ is measured to be somewhat below 70 but adaptive functioning is clinically judged to not be severely impaired.

Adaptive functioning is defined by the DSM-III-R as a person's effectiveness in social skills, communication, daily living skills, personal independence, and social responsibility expected of the person's age and cultural group. Scales suggested to quantify adaptive functioning along with clinical judgement are the Vineland Behavior Scales and the American Association of Mental Deficiency Adaptive Behavior Scale.

The DSM-III-R states that when physical disorders are associated with the Axis II designation, the greater the likelihood is that associated abnormalities in one or more bodily systems may further impair the person's adaptive functioning. Behavioral manifestations included in the Axis II designation are: "passivity, dependency, low self-esteem, low frustration tolerance, aggressiveness, poor impulse control, and stereotyped self-stimulating and self-injurious behavior" (APA, 1987, p. 29).

The DSM-III-R qualifies that adaptive functioning is affected by the type and course of any underlying physical involvement such as progressive genetic disorders, and the quality and quantity of environmental influences. Apparently the degree of impairment in adaptive functioning is correlated with the level of general intellectual functioning, the presence of associated features and complications, and environmental opportunities such as education.

The DSM-III-R states that it may be difficult to diagnose other psychological problems such as depressive disorders, psychotic disorders, and personality disorders because of cognitive and language deficits in people diagnosed with an Axis II designation of 'Mental Retardation'. The causes of the Axis II definition on page 28 of the DSM-III-R (APA, 1987) are said to be mostly biologic, psychosocial, or a combination of the two. Apparently no definite etiology can be established for 30% to 40% of the people seen in clinical settings.

2. Treatment. The group therapy which is described in detail in the 'Method' section of the present study is a constant treatment condition. The therapy was based upon Tomasulo's Interactive-behavioral model. The basic framework of the therapy remained constant in each group session, however, each of the seventeen consecutive groups was different and was determined by the needs of the group members (and to a certain extent the needs of the therapists - in any cases of countertransference), the group processes and the group dynamics.

The treatment consisted of two months of group sessions, twice per week. Two co-therapists and nine (originally ten) group members were involved. All group members received the same exposure to the group therapy except for a few absences. No control group was involved.

3. Independent Variables. The independent variables are reports of possession (or not) of a diagnosis of developmental disability by the subjects.

4. Dependent Variables. a) The dependent variables related to the outcome analyses were the following test results for group members who did and did not report possession of a diagnosis of developmental disability:

i) the nine dimensional scores of the Brief Symptom Inventory (Somatization, Obsessive-compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism), and the three global scores (General Severity Index, Positive Symptom Distress Index, and Positive Symptom Total);

ii) five scores from the Social Adjustment Scale (Work, Social and Leisure, Extended Family, Economic, and Overall Adjustment); and

iii) the Discomfort, Expectations, Mid-point Achievement and End-point Achievement scores from the Target Goals ratings of the subjects' interpersonal goals.

b) The dependent variables related to the process analyses were:

i) the Group Climate Questionnaire scores of: Engaged, Conflict, and Avoiding as evaluated by all groups of raters (subjects with a diagnosis of developmental disability, subjects without such a diagnosis, all group members, therapists and outside observers) for group sessions: one, five, nine, thirteen, and seventeen.

Group members did not rate group session five (see the Procedure section of this paper for an explanation); and

ii) the Hill Interaction Matrix - Group Form evaluations of group sessions: one, five, nine, thirteen, and seventeen by two outside observers which included the following scores: Content/Style (I - Topic, II - Group, III - Personal, IV - Relationship), Work/Style (A - Responsive, B - Conventional, C - Assertive, D - Speculative, E - Confrontive), Quadrant 1, Quadrant 2, Quadrant 3, Quadrant 4, Therapist Participation, Risk Ratio, Intra-group Ratio, and the Quadrant Four Ratio.

5. Interpersonal Learning. The measurement devices utilized within the current study evaluate different components of interpersonal learning or the products of it. The definition of interpersonal learning which is accepted by the author for the purposes of this study is that of MacKenzie (1990).

MacKenzie (1990) says that "Self-understanding and interpersonal learning are two therapeutic factors concerned with the acquisition of insight into one's behavior or reactions and learning from interactional events" (p. 46). MacKenzie goes on to state that self-understanding and interpersonal learning are two processes that are difficult to separate because they are internal and external parts of the same process. He says that "Insight focuses on internal states of mind that are revealed in interpersonal action. Interpersonal learning results in enduring internal alterations concerning how the individual views the interpersonal world" (p. 46).

Apparently interpersonal learning is divided into feedback one receives from others (input), and attempts to try out new behaviors with others (output). Self-understanding is explained as a resulting 'corrective emotional experience'. MacKenzie (1990) states that intense emotional experience is not all that is required for a corrective emotional experience. He says that integration of the meaning of the experience through cognitive understanding helps in the process of internalization and application, and serves to connect the affective component to specific experiences.

CHAPTER II

REVIEW OF THE LITERATURE

A milieu described by Albin (1992), Baladerian and Waxman (1985); Fresco, Philbin and Peters (1992); Mansell, Sobsey and Calder (1992); Pfadt (1991); Sobsey (1988); and Sullivan and Scanlan (1987) which includes neglect, physical abuse, sexual abuse, guilt, denial of services, myths, alternating waves of concern and ignoring, and a withholding of the recognition of human strengths and weaknesses characterizes many of the services 'provided' to people who have been diagnosed with developmental disabilities. The author believes that many care givers, as members of the general society, do not perceive their clients who possess diagnoses of developmental disability as their human equals, and this contributes to the milieu of neglect and abuse.

It seems as if there is a myth which says that people diagnosed with developmental disabilities cannot benefit from psychological intervention. This myth may have been perpetuated by those who are members of a 'helping' profession. Sternlicht's (1966) summary of universal and inherent absences of skills assumed of people with developmental disabilities includes: verbal ability, the ability to deal cognitively with acting out impulses, and the ability to adjust behavior in a social context. Along the same lines, Schneider (1986) states that insight-oriented therapy has seldom been used with those diagnosed with developmental disabilities because of assumed cognitive limitations, lack of insight, and concrete thinking. Johnson (1971) suggests additional reasons psychotherapists traditionally give for not counselling people diagnosed with developmental handicaps: (a) little motivation to be helped, (b) being unaware of difficulties, (c) low intelligence causing people to not understand the need to change behavior, (d) weak egos and poor impulse control precludes the development of independence, (e) too much effort required of therapists for limited results, (f) psychotherapists have little understanding of the personality of those diagnosed with developmental disabilities, and (g) value conflicts often exist between the counsellors and the clients.

Schneider (1986), Shapiro (1979), and Paniagua and De Fazio (1983) seem to agree that there has been an underestimation of emotional needs of people diagnosed with developmental handicaps. It appears that this misjudgement is based upon a belief that the clients' emotional problems are a function of mental deficiency, and therefore not likely to benefit from intervention.

There are a number of references in the literature which suggest that those who are diagnosed with a developmental disability are more emotionally fragile than others. Thus, their needs for psychotherapeutic interventions would seem to be greater (Matson, 1984; Paniagua & De Fazio, 1983; Selan, 1976; and

Szymanski & Croker, 1985). The aforementioned authors all mention that the ego resources of people with developmental disabilities are not as capable as those who do not have such a diagnosis, reducing the effectiveness of coping with stress in everyday life. Paniagua and De Fazio (1983) state that complex defenses, which might channel instinctual drives, are poorly developed in some people diagnosed with developmental disabilities. Robinson and Robinson (1985) point out that people diagnosed with developmental disabilities have a tendency towards faulty resolution of developmental stages and a propensity for fixation. Empey (1977) studied a group of adolescents identified with multiple handicaps. This author concluded that there seemed to be more distortion and primitive fantasies about themselves in this group than there would be in a 'so-called' normal group of adolescents.

The DSM-III-R (APA, 1987) states that people included in their definition of 'Mental Retardation' have a prevalence of other psychological problems of at least three or four times that of the general population - especially in the areas of Pervasive Developmental Disorders, Attention-Deficit Hyperactivity Disorder, and Stereotypy/Habit Disorder.

Solnit and Stark (1977) suggest that complications arising from parents' adverse reactions to what is abnormal maturation can add to emotional fragility. Recent emphasis on deinstitutionalization and pressure to face the stresses of the outside world lead to emotional difficulties in those diagnosed with developmental disabilities (Matson, 1984; Selan, 1976). Nirje (1980), and Paniagua and De Fazio (1983) assert that people with developmental disabilities may have to deal with social contempt and alienation. Szivos and Griffiths (1990) and Tajfel (1981) say that normalization-based services which advocate that the best way to cope with stigma is to 'pass' for 'normal', can sometimes result in disaffiliation from one's group, guilt, and derogation.

Monfils and Menolascino (1983) report results of a study which examined the types and prevalence of mental disorders in a community-based sample of citizens diagnosed with developmental disabilities (114 individuals with an age range of 6 to 76 years). They state that because of a "high incidence of central nervous system impairment and diminished overall interpersonal coping abilities...[people with developmental disabilities] ...present a greater than average risk for developing associated signs and symptoms of mental illness" (p. 83). They also report that it was not unusual to find combined and complex diagnoses in one individual. They give examples of "chronic paranoid schizophrenia, a seizure disorder, and moderate mental retardation; or an unsocialized aggressive reaction of adolescence, mild mental retardation, and cerebral palsy" (p. 73). The diagnostic groups found in decreasing frequency were: organic brain syndromes with behavioral or psychotic reactions (30%), personality disorders (27%), adjustment reactions (21%), schizophrenia (21%), and psychoneurotic disorders (1%). No major affective disorders were observed.

In summation, greater stress is endured by people diagnosed with developmental handicaps than those not so labelled (Cochran & Cleland, 1963; Malpass, Mark & Palermo, 1960; Morganstern, 1973; Silverstein, 1970; Szymanski & Jansen, 1980; Wolfenstein, 1966).

The DSM-III-R (APA, 1987) states that people included in their Axis II definition of 'Mental Retardation' are particularly vulnerable to exploitations such as sexual and physical abuse, and being denied rights and opportunities.

Pfadt (1991) elaborates on the idea of denial of rights and opportunities by stating that even though the mental health needs of those diagnosed with developmental disabilities "are becoming increasingly acknowledged by service providers, psychotherapy is still neglected as a treatment modality" (p. 261).

Sobsey (1988) states that human service providers not only fail to address the needs of developmentally disabled victims of sexual abuse, but contribute to their abuse directly and indirectly. He gives as an example the case of a Montreal group home for emotionally disturbed adolescents in which fourteen staff members were charged with 250 counts of sexual abuse. Indirect means of contributing to abuse include not reporting, not protecting, and even condoning sexual abuse (and other forms of physical abuse) on the parts of human service providers. Mansell, Sobsey, and Calder (1992) report that 26.3% of offenders who assaulted people with developmental disabilities were paid caregivers. Baladerian and Waxman (1985) describe perpetrators of sexual assault against people diagnosed with developmental disabilities as follows:

> ...parents, step-parents, siblings (full, step or other), babysitters, attendant care providers, residential service providers, school personnel (teachers, teacher aides, administrative school staff, janitors, school bus drivers), work personnel (sheltered workshop executive directors, administrators, line staff), competitive employment work staff (boss, supervisor, business owner), professionals (psychologists, physical therapists, medical doctors), medical care staff (hospital nurses, attendants). (p. 5)

Fresco, Philbin and Peters (1992) cite Tharinger, Horton and Millea (1990) who say that professionals believe that the incidence of sexual assault in the handicapped population is higher than in the general population. They also cite national prevalence studies which, they say, estimate that between 68% (Hard, 1986) and 39% (Badgley, 1984) of girls diagnosed with developmental disabilities will have been sexually abused before they reach the age of eighteen. The authors refer to Senn (1988) who says that these numbers may even be greater due to difficulty in obtaining accurate estimates.

Mansell, Sobsey, and Calder (1992) describe a study which surveyed 119 sexual abuse victims who had been diagnosed with developmental disabilities. The subjects responded to the survey with indications that sexual abuse treatment services are typically inaccessible, unavailable, and inappropriate for them. The authors stated that there has been a long history of denial of sexual abuse perpetrated against people diagnosed with developmental disabilities, inadequate service access, low priorities in research and program funding for development of treatment approaches, and a scarcity of properly trained professionals.

The denial of services for those diagnosed with developmental disabilities extends to children's services. Albin (1992) states (in reference to services provided to children who have been sexually abused):

> quite typically, children who are young and developmentally disabled are not treated by the system in the same manner as

> others are. Almost immediately, when agencies that are involved in a child's protection determine that a child is developmentally disabled, there is a hesitancy, if not absolute refusal, to provide the same kind and extent of assessment and (sic) that would occur for other non-delayed children. (p. 37)

Sullivan and Scanlan (1987) cite Christensen (1980) who states that victims of neglect were found more often in classes for the educable mentally retarded. In a study of 138 school-age children in special residential institutions, Christiansen in Sullivan and Scanlan reported a significantly higher frequency of maltreated children, (with over one-half of the maltreatment being sexual abuse), than was found for noninstitutionalized controls.

Sullivan and Scanlan (1987) state that "A major problem confronting mental health professionals who work with maltreated handicapped children and youth is a paucity of available treatment programs with the clinical and staff competence to serve them" (p. 127). These authors state that services which are interventions for non-handicapped clients must be relied upon for treatments of handicapped children and youth in the hope that proper intervention will be the result.

Pfadt (1991) asserts that there is little reason to believe that people diagnosed with developmental disabilities receive a full range of individual and group psychotherapies which are offered to those without such disabilities. The author describes designs, implementations, and evaluation procedures for group therapy with clients who have received dual diagnoses of mental retardation and mental health problems.

Monfils (1984), in describing and examining new challenges which social workers face in providing for the mental health needs of developmentally disabled clients in institutions and communities, states that structured groups can benefit all formal designations of developmentally disabled clients (mildly to profoundly involved).

MacKenzie (1990) asserts that group therapy has been shown in research studies to be an effective treatment, and states that individual and group therapy are about equally beneficial. Yalom cites Glass and Miller (1980) who reviewed 475 controlled studies as concluding that "the average person who receives psychotherapy is better off at the end of it that 87% of the persons who do not" (p. 87). In addition the authors go on to conclude that both group and individual psychotherapy have similar outcomes. MacKenzie (1990) says that, compared with individual therapy, group therapy's tempo of interpersonal learning is usually more vigorous, multifaceted, and unpredictable.

The use of groups in therapeutic work with people who have a diagnosis of developmental handicap is not new (Bates, 1980;

Bregman, 1984; Duffy, 1991; Empey, 1977; Fletcher, 1984; Fresco, Filbin & Peters, 1992; Gentile & Jenkins, 1980; Hariman, 1980; Leland, Walker & Toubouda, 1959; Matson & Senatore, 1981; Monfils, 1985; Stavrakaki & Klein, 1986; Stengel, 1987; Sternlicht, 1966; and Szivos & Griffiths, 1990). All of the aforementioned authors describe group therapy with people diagnosed with developmental disabilities.

Pfadt (1991) states that the reluctance of some clinicians to consider the possiblity that clients diagnosed with developmental disabilities can benefit from psychotherapy is a reason why there is a lack of process related research. Pfadt says that an alternative to the dangerous use of "psychoactive medication" and "aversive control procedures" currently used to treat the mental health needs of developmentally disabled people is needed (p. 282). Pfadt states that perhaps group psychotherapy can be examined experimentally as a viable alternative.

There is evidence in the literature which supports the idea that particularly those who possess a label of developmental disability are capable of effectively functioning within a group context. Gan, Tymchuk and Nishihara (1977) found that those diagnosed as mildly developmentally handicapped have the insight and the ability to answer an attitude questionnaire with accurate information and realistic attitudes toward their needs and abilities.

The work of Nigel Malin (1983) supports the assertion that people diagnosed with developmental disabilities are able to work effectively in groups, but are affected by many of the common threats to group cohesiveness that many other groups experience. The author described his analysis of interactional group dynamics in residential care homes for adults who have developmental disability diagnoses. He found evidence that the individuals living in the residences worked closely together to organize their homes in constructive ways. He also found divisions among residents which were interpreted to have serious implications for the individuals' abilities to survive together in an intact group.

In addition Padin-Rivera, Maurer, Newbrough, Page and Simpkins (1986) examined leadership functions in a work group clique of adults diagnosed with developmental disabilities. They found two prominent group leaders: an instrumental leader and a socioemotional leader. These designations seem to be closely related to descriptions found in group literature, such as in Bion's work (1961).

Tomasulo and Razza (1992) have identified fourteen therapeutic factors in pilot studies which, they say, have empirical validity with respect to group therapy in general. Tomasulo and Razza state that these factors have been observed in therapy groups with members who possess diagnoses of developmental disability and can be identified and reinforced by group therapy facilitators. The fourteen factors are: acceptance/cohesion, altruism, universality, installation of hope, guidance, vicarious learning/modeling, self-understanding, interpersonal learning, self-disclosure, catharsis, imparting of information, corrective recapitulation of primary family, development of socializing techniques, and existential factors. These factors have been taken from the works of Yalom (1985) and Bloch and Crouch (1985).

Monfils (1989) states that people who have been diagnosed with developmental disabilities, and who have some insight about their problems, can communicate feelings and indicate a motivation to change their life situation are suitable candidates for group therapy.

Fletcher (1984) reports that people who have been given a diagnosis of developmental disability and who participate in group therapy benefit from a structured, supportive setting which fosters a sense of security, trust and community. He says that this climate can help alleviate feelings of rejection, a lack of self worth and acceptance, issues related to individuation and separation, and losses of valued relationships.

According to Humes Jr. (1970) in Empey (1977), people with diagnoses of developmental handicap have many concerns regarding social interaction and self-concept. Humes Jr. says that groups are a natural arena in which to explore identity issues and to deal with a strong defensive character armour.

Yalom (1985) stipulates that those diagnosed with a developmental disability can benefit from group therapy with a homogeneous population. MacKenzie (1990) asserts that Axis II personality features may not designate that a person be eliminated from time-limited group therapy, but that general social adaptation should be a very important factor for consideration. .

The use of group therapy is seen in the literature as having a variety of special applications for people diagnosed with developmental disabilities. Hariman (1980) describes small group therapy for clients classified as mildly developmentally disabled, suffering from remitted psychosis, and taking medication. Hariman says that the clients reported an increased sense of well-being, inner peace, security and happiness after sixteen weeks of group sessions consisting of hypnosis and relaxation. Hariman asserts that after the group the clients spoke and smiled more, complained less and asked more questions. They also apparently had their medications reduced.

Griffiths, Hingsburger and Christian (1985) describe the use of groups in teaching sex education as a part of a treatment program for developmentally handicapped sexual offenders.

Fresco, Philbin and Peters (1992) state that group therapy is a viable intervention for women diagnosed with developmental disabilities who have been sexually assaulted and abused. They describe a sexual assault support group for women diagnosed with developmental disabilities, which they say had many positive results for the participants. Even though the differences between pretest and posttest scores using the Prout-Strohmer Personality Inventory (Prout & Strohmer, 1991) and the Strohmer-Prout Behavior Rating Scale (Strohmer & Prout, 1989) were not significant, the authors state that staff members who were in contact with the group members informally reported improvements in some group members' assertiveness, self-confidence, acceptance of their sexuality, and their assessment of their personal safety around males.

Monfils and Menolascino (1983) say group therapy is gaining acceptance in combination with other interventions (psychopharmacological treatments, individual therapy, and family interventions) as approaches for developing emotional maturity; teaching appropriate social behavior; and reestablishing coping mechanisms and adaptive behaviors with clients diagnosed with adult schizophrenia and developmental disabilities. The authors propose that individual, group, or milieu therapies can be included as adjuncts to a behavioral management program for inpatient treatment for people diagnosed with developmental disabilities and personality disorders. They go on to assert that these types of therapy may combine positive peer pressure and confrontation in order to aid in dealing with primitive defenses, as long as they provide clarification and support and allow for appropriate expressions of feelings, concentrate on current and future issues, and gently ignore past failures.

Several authors advocate the use of family therapy in conjunction with group therapy for people with developmental disabilities because of the great effect family issues tend to have (Fletcher, 1984; Monfils, 1985; Stavrakaki & Klein, 1986). For example, issues of: separation, loss, rejection, and differentness seem to be dominant trends in group therapy with people who have been given diagnoses of developmental disabilities. These trends tend to have much to do with family relationships and origins.

Researchers have isolated themes in group work with people labeled as developmentally handicapped. Significant group themes are found by Empey (1977), Hughson, Sannuto and Vallally (1992), Monfils (1985), and Szivos and Griffiths (1990).

Empey (1977) describes the following themes as evolving from the small groups which were held for members who generally ranged in I.Q. from 60 to 85, most of whom ranged in age from 18 to 25, and the majority of whom had some degree of visual handicap: abandonment and exclusion, dependency, personal identity, anger, and loss.

Szivos and Griffiths (1990) identified the following processes in their group which reflected a consciousness raising paradigm, and which consisted of three men and four women between the ages of twenty and thirty-five who possessed a formal classification within the mild or borderline range of developmental disability: a more accurate self-appraisal; taking responsibility in life and relationships; an embryonic political action towards injustices in the systems which governed the group members' lives; limited strengthening of group affiliation; a greater willingness to share advice and experiences, to consider each other as friends, and to show compassion for those less well off than themselves. Szivos and Griffiths say that the following themes were experienced by the members of their group in relation to loss: shock, anger, and denial in relation to acknowledging the label of handicap as a loss; and a sort of compensatory or comparative acceptance. The authors suggest (as Empey does) that if the goal of acceptance of handicaps is itself unacceptable in a group, (as they found it to be), it could be therapeutically damaging to encourage people to give up their defenses. This may be especially true if the clients have poorly developed defenses to begin with.

Hughson, Sannuto and Vallally (1992) report that specific themes were evident in their integrated women's support group, but they state that the themes were largely consistent with those of mutual support groups for women in general. They go on to say that there are some themes such as: "poverty, social isolation, barriers to paid work, relegation to sheltered workshops, dependence on medication, and protection from independent choices," which are amplified by the reality of disability (p. 5). Other themes reported in the integrated women's mutual support group were death and loss, the meaning of life, valuelessness, powerlessness, dependence, oppression, solidarity and vulnerability as they related to the issue of sexual abuse, and empowerment and self-management in relation to personal health.

Monfils (1985) describes themes which tend to occur in the theme-centred groups which he conducts as: an inadequate self-image and poor self-esteem; sexual issues and concerns which include hunger for relationships, physical affection and love; frustration and irritation in interpersonal relations; feelings about being 'retarded' or different; and adjustment problems when separating from families, moving to community residences or vocational placements.

The therapeutic factors found evident in groups and originated and/or accepted by many well respected group therapy practioners and researchers (Yalom, 1985; Bloch & Crouch, 1985) have been found to be evident in group therapy sesssions for people who have been diagnosed with developmental disabilities. (Tomasulo & Razza, 1992) The themes reported to be found in groups held for people diagnosed with developmental disabilities can be seen as evidencing most of the universal therapeutic factors advanced by Yalom, and Bloch and Crouch. For example Existentialism can be discerned in reported themes related to loss (Empey, 1977; Szivos & Griffiths, 1990; and Hughson, Sannuto & Vallally, 1992), differentness (Hughson, Sannuto & Vallally; Monfils, 1985), meaning of life issues, powerlessness, oppression, valuelessness, death, (Hughson, Sannuto & Vallally), and abandonment and exclusion (Empey; Hughson, Sannuto & Vallally). The themes of solidarity (Hughson, Sannuto & Vallally), viewing each other as friends, and a limited strengthening of group affiliation (Szivos & Griffiths) can be seen as examples of Acceptance and Cohesiveness. The themes of compassion being shown for others and embryonic political action against government systems (Monfils) could be interpreted as examples of the therapeutic factor of Altruism. The theme of a greater willingness to share experiences and advice (Monfils) could be an example of both Self-disclosure and Guidance. The themes of anger (Empey; Szivos & Griffiths), and shock (Szivos & Griffiths) could be examples of Catharsis. The therapeutic factor of Self-understanding could be seen in the found themes of personal identity (Empey), a more accurate self-appraisal, a sort of compensatory acceptance of a label of handicap (Szivos & Griffiths), and empowerment and self-management in relation to personal health (Hughson, Sannuto & Vallally). As well, Interpersonal Learning and Extentialism could be identified as operating in the themes of taking responsibility in life and relationships (Szivos & Griffiths). Interpersonal Learning could also be said to be a factor in the sexual issues theme described by Monfils.

Many disturbing facts point to the dire need of psychological services for people diagnosed with developmental disabilities: they are underserved psychologically, they have a greater need than the general population for such services, they are sexually abused more than the general population, they are more dependent on others for primary and secondary needs fulfillments than most people, and they fear sexual assault by caregivers as well as neglect. These distressing factors also suggest to the author that caregivers have a duty to correct an abusive milieu which has existed with at least their knowledge for a very long time.

Presently it seems that caregivers are not attempting to correct the abusive environment because of a dire lack of psychological services for people diagnosed with developmental disabilities.

Despite the lack of psychological services, the literature describes studies of psychotherapeutic interventions for people with developmental disabilities and many studies assert the benefit of such interventions. Group psychotherapy is described in the literature as a viable method of treatment. Many authors have outlined themes present in groups composed of people with developmental disabilities. Some of these themes seem to be universal to human experience and others seem to be unique to the group of people labelled as developmentally disabled. The author of the current study has suggested how many of the themes described in the literature of group therapy interventions for those with a diagnosis of developmental disability can be interpreted as included within the widely accepted therapeutic factors which Tomasulo (1992) specifies. These factors have been taken from of Yalom (1985), and Bloch and Crouch (1985).

It is suggested by the author that common human experiences exist between those who have and do not have a current diagnosis of developmental disability. This author suggests that common human experiences are represented in the themes described herein in groups involving people diagnosed with developmental disabilities (Empey, 1977; Hughson, Sanuto & Vallally, 1992; Monfils, 1985; and Szivos & Griffiths). One important similarity is that if clients are assumed to have the potential for growth in therapy, they will probably grow. This position was supported by Beutler, Pollack and Jobe (1978) in their study which selected one client from each of twenty second year graduate counselling students' case loads. The clients ranged in age from seventeen to twenty-five years old. It is reported that the therapists' attitudes towards their clients' values had a great impact on the clients' feelings of growth. A strong relationship was indicated between the clients' acquisition of their therapists' values and their own ratings of improvement.

It is the author's belief that what can be achieved as an integrated society and in the microcosm of group therapy will only be revealed after integration. The key to change in this area is action, experimentation, and documentation. The barrier standing in the way of including those diagnosed with developmental disabilities in the population of people who benefit from group therapy in particular and psychotherapy in general seems to be mythical.

Rationale

Since the purpose of the current study is to shed light upon the issue of whether or not all group members can benefit from a mutually agreed integration in group therapy, the hypotheses reflect change. In addition some division must be made in the data to separate the groups of people who are with and without a diagnosis of developmental disability in order to compare results. The current study separated the data for the evaluation of self ratings of behavioral functioning, the self-ratings of emotional states, self ratings of therapeutic goal achievements, and group climate ratings of five sessions.

In addition, because the author expected positive change to occur as a result of therapy, many one-tailed hypotheses were made especially in reference to the individual outcome evaluations.

As an attempt to minimize halo effects, bias toward leniency or severity, central tendency responses, and position or proximity biases (Beutler & Hamblin, 1986) the outcome tests evaluated a variety of human characteristics and the process instruments were rated by a variety of types of raters: group members, therapists, and outside observers.

Hypotheses

The study tested one basic hypothesis. This general hypothesis is:

Adults who possess a diagnosis of developmental handicap and those who do not possess such a diagnosis, who are involved in short-term, integrated group therapy based upon Dr. D. Tomasulo's Interactive-behavioral Model (1992) which spans eight and one half weeks with two sessions per week, will demonstrate positive change as manifested outcome and process measures. These measures will include the assessment of: experiences of psychological symptom patterns, social role functioning, target goal self evaluations, group processes, and group content.

The specific hypotheses tested were as follows:

A. Brief Symptom Inventory (BSI).

1. Comparisons of independent variables.

No significant mean differences nor interaction effects will be found between the BSI (Derogatis, 1982) scores of subjects who reported possessing a diagnosis of developmental disability (DD) and those who did not report possessing such a diagnosis (ND) across pretesting and posttesting. Within the current study in references to the hypotheses from this point forward, 'DD' will represent the group of people who reported possession of a developmental disability, and 'ND' will represent the group of people who did not report such a diagnosis.

2. Norm comparisons.

The obtained posttest scores will be found to be significantly lower than the Psychiatric Outpatient Norms of the Brief Symptom Inventory (Derogatis, 1982). The obtained pretest scores will not be found to be significantly lower than the Psychiatric Outpatient Norms.

3. Score comparisons over time.

A significant lowering of obtained scores from pretesting to posttesting of the BSI will be observed.

B. Social Adjustment Scale - Self Report (SAS-SR).

4. Comparisons of independent variables.

No significant mean differences nor interaction effects will be found between the mean SAS-SR (Weissman, & Paykel, 1974) scores of DD and ND subjects from pretesting to posttesting.

5. Norm comparisons.

The posttest obtained scores will not be found to be significantly higher than the SAS-SR Community Sample Norms

(Weissman, 1978). The SAS-SR pretest obtained scores will be found to be significantly higher than the Community Sample Norms.

6. Scores comparisons over time.

A significant lowering of scores from pretesting to posttesting of the SAS-SR will be observed.

C. Target Goals.

7. Comparisons of independent variables.

No significant mean differences nor interaction effects will be found between the mean Target Goal (MacKenzie, & Dies, 1981) ratings of DD and ND subjects for the Expectations ratings, the Achievement Mid-point ratings to the Achievement End-point ratings.

8. Comparison of Achievement scores at the mid-point and end-point of therapy.

The Achievement End-point self rating of group members' interpersonal goals in the Target Goals - Group Member scale (MacKenzie & Dies, 1981) will be observed to be higher than the Achievement Mid-point self rating.

9. Comparison of Expectation scores with Achievement scores at the mid-point of therapy.

The Achievement Mid-point self rating of group members' interpersonal goals in the Target Goals - Group Member (Target Goals) scale will be observed to be higher than the Expectations self rating.

10. Comparison of Expectation scores with Achievement scores at the end of therapy.

The Achievement End-point self rating of group members' interpersonal goals in the Target Goals scale will be observed to be higher than the Expectations self rating.

D. Group Climate Questionnaire (GCQ).

11. Mean rating scores comparisons over time.

Regardless of the source of the ratings, it is expected that significant differences in the mean rating scores of: Engagement, Conflict and Avoidance from the Group Climate Questionnaire (MacKenzie, 1990) from five successive group therapy sessions (sessions: 1, 5, 9, 13 and 17) will be found over time.

12. Trend Analyses.

Significant linear, quadratic and/or cubic trends will be found from trend analyses for the GCQ scores.

E. Hill Interaction Matrix - Group Form (HIM-G).

13. Change over time indicated in percentile equivalents.

Graphs depicting time sequences of the HIM-G (Hill, 1965) scores should show changes from session 1 to session 17. The sessions evaluated are: session 1, session 5, session 9, session 13 and session 17. The scores to be analyzed graphically are: Content/Style (I, II, III, and IV), Work/Style (B, C, D, and E), Quadrant/Style (1, 2, 3, and 4) and the Therapist/Member Ratio. General change over time will be observed to be characterized by an increase in: Quadrant 4 scores, the Confrontive (E) Work score, the Relationship (IV) Member-Centred score, the Group (II) Topic-Centred score; as well as a decrease in: Pre-Work scores (Conventional - B, and Assertive - C), Quadrant 1 scores, the Topics (I) Topic-Centred score, the Speculative (D) Work score, and the Personal (III) Member-Centred score.

14. Change over time indicated in three percent scores.

Change over time will be observed in a graph comparison of mean percent scores of Therapist Activity, the Intra-Group Ratio and the Risk Ratio of two outside observers from the HIM-G. This comparison was originally made in Hill and Gruner (1973). It is hypothesized that the Therapist Activity score will decrease, and the Intra-Group Ratio and the Risk Ratio will increase.

15. Scores comparisons with HIM reference data.

No significant differences will be found between the obtained HIM-G score means of: Content/Style, Work/Style, Quadrant/Style and Therapist Activity for: Group One, Group Five, Group Nine, Group Thirteen or Group Seventeen, and the HIM reference data (Hill, P., 1964).

F. Correlation Matrix

16. Correlation Matrix Analysis.

Upward or downward trends of significant correlation coefficients in a matrix made up of the following scores in the following time-oriented order will be observed: (a) the General Severity Index (GSI) pretest score from the BSI, (b) the pretest Overall score from the SAS-SR, (c) the Engagement, Conflict and Avoidance scores from the GCQ, in respective order for session one and session nine, (d) the mid-point Achievement rating from the Target Goals, (e) the Engagement, Conflict and Avoidance scores from the GCQ, in respective order for session 13 and session 17, (f) the end-point Achievement rating from the Target Goals, (g) the GSI posttest score from the BSI, and (h) the posttest Overall score from the SAS-SR.

Hypotheses 1, 2, 4, 5, 7, 8, and 9 were tested in a directional way using one-tailed tests. The remaining hypotheses were tested in a non-directional form. In the cases of hypotheses 13 and 14 non-statistical (graphical) procedures were used.

CHAPTER III

METHOD

Subject Demographic Characteristics

Descriptive demographic characteristics for the sample were collected by the author and are shown in Table 1.

The demographic characteristic data presented in Table 1 were collected at pretesting and again at posttesting. Some change was noted. These changes are analysed in the section of Chapter IV pertaining to the SAS-SR scores.

One of the group members who did not report possession of a diagnosis of developmental disability ended a common law relationship during the two months of group sessions. This changed their marital status in Table 1 from 'Common law relationship of at least one year' to 'Never married'. Another group member who did report possession of a diagnosis of developmental disability began another job different than the employment reported at pretesting, which changed their employment status in Table 1 from 'Semi-skilled employment' to 'Unskilled employment'. Another group member who reported possession of a diagnosis of developmental disability stopped a babysitting position which was causing the member distress because the group member said that they suspected the mother of child abuse. This changed the members's employment status from 'Unskilled

Table 1

Demographic Characteristics of the Sample (N = 9)

		Total	Reported Diagnosis of Developmental Disability n = 4 Pretest	Posttest	No Report of Diagnosis of Developmental Disability n = 5 Pretest	Posttest
Age	M	29.89	28	--	31.4	--
	Median	28	28	--	31	--
	Range	24 - 39	24 - 32	--	25 - 39	--
	SD	4.86	3.27	--	5.73	--
Sex						
Male			2	--	1	--
Female			2	--	4	--
Physical Involvements						
Cerebral Palsy - ambulatory			1	--	1	--
Wheelchair-bound - trauma			--	--	1	--
Education						
Partial college training			0	--	2	--
High school graduate			1	--	1	--
Partial high school			2	--	2	--
Junior high school			1	--	0	--
Occupation						
Skilled manual employees			0	0	1	1
Semi-skilled employees			1	0	0	0
Unskilled employees			1	1	0	1
Dependent			2	3	4	3
Marital Status and Children						
Never married			3	--	4	5
Common law relationship of at least one year			1	--	1	0
Have a child/children and are living with them			0	--	0	--
Have a child/children not living with them			1	--	2	--

Note. A blank (--) is printed where no change was observed.

employment' to 'Dependent', since the babysitting job was the only position which supplemented the member's dependent financial status. A group member who did not report possession of a diagnosis of developmental disability began a work placement position through their workshop training program at a delicatessen outlet in a shopping mall. This changed the member's employment status from 'Dependent' to 'Unskilled labour'.

Other demographic changes which occurred between the two collection times do not pertain to the information presented in Table 1 or did not show up in the pretesting-posttesting data analysis. These changes are worth mentioning. A group member who reported possession of a diagnosis of developmental disability separated from their common law spouse during the group therapy and then returned to the relationship just before the end of the sessions. Another group member who did not report possession of a diagnosis of developmental disability broke off a romantic relationship which the member said was causing distress. A group member who reported possession of a diagnosis of developmental disability employed another independent support worker because they were not satisfied with the original worker.

Medications reported to have been taken by the group members during the course of the therapy are listed in Table 2. As can be seen in Table 2, medications taken by the subjects, with one

Table 2

Reported Medications During Group Sessions (October 2 to November 27)

Group Members Who Reported Possession of a Diagnosis of Developmental Disability

Group Member	Medication	Time
1	Dilantin	October 2 to November 27
	Tegretol	October 2 to November 27

Group Members Who Did Not Report Possession of a Diagnosis of Developmental Disability

Group Member	Medication	Time
2	Nicotine Gum	October 2 to November 27
	Mogaden	October 2 to October 27
	Desipramine	October 28 - October 30
	Haldol	October 31 to November 27
3	medication for depression (not specified)	October 2 to November 27
4	medication for depression (not specified)	October 2 to November 27

Note. Clients were formally asked before therapy, at least three times during therapy and after therapy regarding medication information. Table 2 describes all available reported information gleaned from this questioning. If medication names are not specified, consent to contact prescribing doctors regarding medications was not given.

exception, remained stable throughout the course of the group therapy.

Procedure

Subject Recruitment

The subjects were recruited from various mental health, workshop and counselling services in a large western Canadian city. Organizations which serve specific populations were contacted: those who possess a diagnosis of developmental handicap and those who have mental health concerns (and who do not possess a diagnosis of developmental handicap). Word of mouth was also a method of recruitment. Selection of subjects was based upon the prospective participants' interest in a personal concerns group.

Ten people were originally involved in the group as participants. Five were identified as possessing a formal diagnosis of developmental handicap and five did not have such a diagnosis.

Initially there was a problem of assigning group members to one of two designations (those who are in possession of a diagnosis of developmental disability, and those who do not possess such a diagnosis) without being unduly intrusive, especially if there was reason to believe that a person was denying the possession of a developmental disability label as a defense mechanism. The two designations were only made reference to in the data analysis, not during the group therapy.

The major source of information was the subjects themselves. In some appropriate cases, their therapists (psychiatrists, social workeres, psychologists), were available with the consent of the group members to give information. Some people did not have therapists or parents who could give diagnosis information. Sometimes it was difficult to ascertain a definite DSM-III-R referenced diagnosis (APA, 1987). The author has found that defensiveness and even denial surrounding a stigmatizing label is common for people who have been diagnosed with developmental disabilities - as it is for anyone saddled with a negative label.

In order to place some group members into one of the two study designations, information other than formal diagnostic referencing was utilized. If a person gave educational information during the informal interview which referred to a school or an education program which provided special education only for those who had been diagnosed with a developmental disability, they were placed in the subject group which was characterized by such a diagnosis. Other descriptions of special programs like People First and the Special Olympics were used as similar reference points.

One group member left the group after attending two sessions and was referred to a more appropriate counselling service. This group member was not included in any of the data collections. Another group member decided to end their participation in the sessions after the thirteenth group session. This group member had attended most of the sessions and agreed to complete the posttesting. Therefore the data collected from this member was included in the data analyses. Both of these members had reported possession of a diagnosis of developmental disability.

A problem which was addressed by the study, which seemed in retrospect relatively simple to resolve, was the recruitment of group members and subsequent mutual integration of members into a group which was composed of people with and without a diagnosis of developmental disability. This was necessary so as not to present an intervening variable into the study which might negatively affect any processes, results, and experiences.

The therapy, which was free of monetary charge, was publicized throughout the city agencies as an integrated one made up of both of the aforementioned population groups. Two information nights were held where interested individuals (prospective group members and supporting individuals) came to meet the therapists and each other. The assumption was that everyone who was interested could see all other prospective members and the co-therapists, could be presented with information regarding the project and consents, and could decide for themselves whether or not they would like to be involved in the group.

In all preliminary interviews with potential group members, and later with members who had committed to attending the group sessions, the human equality of all participants was accented in the co-therapists' references to the group and in their answers to questions posed by the potential members and their support people. This attitude was continued and modeled by the co-therapists throughout the run of the therapy sessions. Never was there a problem related to persecution or fear on the part of any group member in relation to whether or not a particular member (or members) may or may not possess a diagnosis of developmental disability - or any other discernable evidence of minority group membership. Ultimately, this 'problem' was reduced to a non-issue. The reducing of this 'problem' was not observed to have suppressed discussion of personal minority group membership within the sessions, however.

All prospective subjects were asked to agree to be involved in a pre-group informal interview with the author. The four purposes of this interview were: (a) to present and explain the consent forms to the client (and, if necessary, the client's guardian), and to have the forms signed, if the prospective subjects were so inclined (see consent sheets in Appendix A and Appendix B); (b) to review the course of therapy, answer any questions which the prospective participants and/or their guardians (if appropriate) may have had about the group, and to review the testing procedures which the prospective participants were to complete as a part of the research project; (c) to assess the prospective subjects' suitability for the proposed group and research project; and (d) to train the subjects to complete the pretests using the Target Goals rating scale, to train the subjects on the use of the GCQ or to schedule another appointment where the training and completion of the pretests could occur.

Suitability of prospective subjects was based upon the following criteria: (a) the ability to verbalize needs and wants, (b) the ability to understand and follow conversation, (c) the ability to communicate personal interest and commitment to participating in the proposed group, (d) the ability to understand the purposes of the research project and the need for testing, (e) the ability to understand the consent forms especially regarding each prospective subjects' right to opt out of the group and/or the testing procedures and video taping at any time, (f) the ability to follow instructions regarding test-taking behaviors and the ability to indicate one choice out of five on a self-report test (this did not necessarily include the ability to read or write), and (g) the ability to function within a group therapy atmosphere.

The above criteria do not identify in any way a particular formal functioning level (for example: severely, moderately, mildly or borderline mentally retarded) on the part of any prospective client. The last point, (basic ability to function within a group therapy atmosphere), was evaluated upon criteria which included: (a) the ability to tolerate an arousing environment (MacKenzie, 1990); (b) the ability to tolerate sitting in a room and attending at a basic level to what is going on (MacKenzie, 1990); (c) does not characteristically use intense projective defenses - for example, a high degree of suspicion may preclude the use of interpersonal exchange modalities - as in a person who may be descibed by some psychological personnel as utilizing enduring paranoid defenses (MacKenzie, 1990); (d) is not formally described by some psychological professionals as possessing severe character pathology in the schizoid range, or having a long history of antisocial personality disorder or borderline personality disorder since early adolescence (MacKenzie, 1990); and (e) is not currently experiencing a severe life crisis which would indicate different and/or more appropriate therapy interventions (Yalom, 1985).

Prospective, interested subjects who were currently involved in active psychological therapy were advised to continue with that treatment and not to become involved in this study. If a prospective, interested subject was involved with a therapist the author contacted the therapist (with the consent of the prospective subject). If it was determined through contact with the interested subject and the therapist that no regular active therapy was going on - and all parties agreed that membership in the study's group may be beneficial for the prospective subject; then the interested party was given the option of joining the group.

Prospective group members were also advised to seek counselling elsewhere if they were planning on undergoing medication changes over the course of the group sessions. Only one member reported a medication change (apparently unplanned) which occurred during the sessions.

Treatment

The group therapy, which constitutes the constant treatment in the present study was co-facilitated by the author and C.H., Child Care Worker under the supervision of Dr. G. K. Two groups were held each week for two months - one on Tuesday evenings and the other on Friday evenings. The groups were scheduled to last for one hour each group night. The group sessions began Friday, October 2, 1992 and ended Friday, November 27, 1992.

For the purposes of the group therapy, an assumption was made that each individual group member was a normal individual with normal developmental issues who had come to the group willing to ease some state of discomfort which they were experiencing. The state of being 'normal' is assumed to have nothing to do with medical or psychiatric diagnoses. It is simply thought of as a state of being that all humans share because of their vast common experience.

The openness of group structural planning can be reflected in a Rogerian conceptualization which trusts: "the group, given a reasonably facilitating climate, to develop its own potential and that of its members" (Rogers, 1969, p. 49). Therefore it is assumed that the group developed a sense of direction that was valid for it and its members.

The use of the Target Goals sheet before therapy, in the middle of the course of the sessions and at the end of the eight and one half weeks provided a setting of goals for each individual group member. However, only one to three goals were to be given by each member, and could be modified or added to later by each member. This setting of general goals was hoped to provide the members with a focus with which they could monitor their progress and evaluate the treatment. The goals were not intended to be detailed, nor to completely dictate the course of therapy.

A basic group session structure was also employed. However, as will be explained later, the group developed its own structure, utilizing the original one. The model which was used for the protocol for each group therapy session is the Interactive-behavioral group model developed by Tomasulo (1992).

After searching the literature on group psychotherapy, this author was unable to find any substantive research on integrated group therapy. A description of a support group for women, including those diagnosed with a developmental disability was found (Hughson, Sanuto & Vallally, 1992; and Wight-Felske & Hughson, 1991). The use of group therapy for people possessing a diagnosis of developmental disability has been outlined by such authors as: Gorlow, Rosen, Enig and Smith (1963), Richards and Less (1972), Rosen and Roasen (1969), and Wilcox and Guthrie (1957). However, the concept of integration was not addressed within this and even the more current literature (Bates, 1980; Bregman, 1984; Fresco, Philbins and Peters, 1992; Gentile and Jenkins, 1980; and Matson and Senatore, 1981).

The Interactive-behavioral model (Tomasulo, 1992) was utilized as a guide for the group therapy provided. This model is one which was developed for people who have been diagnosed with developmental disabilities and is based upon psychodrama techniques. The model encompasses four stages: orientation, warm-up and sharing, enactment and affirmation.

The Interactive-behavioral model (Tomasulo, 1992) may have been developed for people diagnosed with developmental disabilities, but it is based upon long-standing, proven and established principles of group therapy - and is specifically based upon the psychodramatic process. Both psychodrama and group therapy have similar origins. Psychodrama was originated by J. L. Moreno who also was a main contributor to the development of group therapy techniques (Blatner & Blatner, 1988). Tomasulo (1991) states that "Psychodrama is a powerful action oriented technique that allows for group members to act out their needs in a challenging yet safe environment" (p. 265). Tomasulo (1992) also has incorporated therapeutic factors from Bloch and Crouch (1985) and Yalom (1985) which have been accepted by other prominent writers in the field of group psychotherapy. One of these writers is MacKenzie (1990). The author of the current study determined that use of Tomasulo's model was the most appropriate one for an integrated group becase its origins and its adaptation might allow people both with and without a diagnosis of developmental disability to benefit from it.

The orientation stage of Tomasulo's (1992)

Interactive-behavioral model requires that the facilitators do cognitive networking, as Tomasulo states, to establish basic interactions between and among group members. Tomasulo states that this stage is characterized by the facilitators helping group members to participate in the group process. The reason for this is, as Tomasulo says, that many obstacles may come in the way of interactions. Some obstacles could be: poor eye contact, impaired hearing, problems with short-term memory or recognition, inattention, distractibility, delayed responding, confusion, hyperactivity or speech impediments. The orientation stage allows the emergence of the therapeutic factors through encouragement and participation. Tomasulo and Razza (1992) state that this process has the goal of anchoring each member in a direct and communicative manner. The orientation stage should last approximately 20 to 25 minutes.

By the fourth session, the orientation stage was reduced in time allocation in the integrated group. The members seemed to wish to get right to the next stage. Therapists returned to the orientation stage periodically throughout the course of the group sessions (and not necessarily right at the beginning of groups - but where such a process seemed to be needed). This did not occur frequently, however. The orientation stage occurred approximately once every group during the first eight sessions and often was not necessary at all, especially during the latter group sessions. Time spent in orientation evolved to approximately 10 or 15 minutes in each group where it occurred.

The next stage is called the warm-up and sharing stage by Tomasulo (1992), and should last approximately 20 to 25 minutes as well. Tomasulo states that in this stage more intimate interactions occur. He says that there is more interpersonal learning, guidance, socialization and acceptance in this stage. Tomasulo says that during the sharing and warm-up, self-disclosure continues and the members become warmed up for the next stage, which is entitled enactment. During the warm-up a protagonist may be chosen for the enactment stage through volunteering, being chosen by the group or the facilitators (with personal choice involved to refuse or accept the position), or as a natural development of the sharing and warm-up stage. During the latter half of the sessions (session 8 to session 17, inclusive), it became less and less necessary for the therapists to select members for enactments or to solicit comments from members. Group members came to naturally offer support, comment, and solicit interaction themselves among the group members as the sessions wore on.

The enactment stage is to last approximately 5 to 10 minutes which always includes some form of action. In this group, the psychodramatic technique of doubling was always be used. Role play and role reversals were also used, but always only after a doubling had occurred. Tomasulo describes the purpose of doubling as the provision of emotional support for the protagonist (the person who volunteers to be doubled). It also is described as giving emotional expression and reorganizing perceptions.

Doubling occurs when another member (or members) or the facilitator stands behind the protagonist and expresses thoughts and feelings experienced in the moment by the protagonist. Doubles are chosen by the facilitator, the protagonist or on a voluntary basis. The protagonist can also be their own double. There should be frequent checking in with the protagonist on the correctness or the fit of the doubling. The double talks for the protagonist and says what they think the protagonist is feeling but is not saying. Other processes and techniques involved in doubling are: "exaggeration, minimization, introducing alternatives, restatement, amplification, verbalizing the resistance, and induction of paradoxes" (Tomasulo, 1991, p. 265).

After the fifth session, group members began to spontaneously double for each other. During the latter half of the sessions, group members would double spontaneously for one another during sharing in a seemingly natural manner as a part of the on-going conversation, sometimes with some modelling done by the therapists first. They began to remain in their seats for doubling, only to move out of the circle for role plays, role reversals, empty chair, and so forth. They began to drop the preparatory: 'I'm going to double for you now, O.K.?' and would include the doubling in the flow of conversation.

A typical example of this evolution of doubling follows (in the thirteenth session a group member shares that he is beginning a new job position):

A(group member): 'I'm very nervous and I'm excited because...I don't know how to...I know how to act and to do things, but I don't. Do you know what I'm trying to say? And kind of leery about what's going to happen? I'm kind of...it gives me lots of life - that I thought I deserved. I worked there two years. At least I get some kind of payback and she's giving me a chance to go from nine o'clock to four o'clock in the morning as manager. God, it's right on.'

B(therapist): 'So, I feel energized.'

A: 'Yes, very, very deep. Like I'm really estatic. I was...like all day long, I was thinking, 'Oh boy, I can't wait to be a manager.' I can't wait. Gotta control. It's...oh...it's...'

C(group member): 'I've got butterflies in my stomach.'

A: 'Yeah, I actually do.'

D(group member): 'I feel like leaping over the hill!'

A: 'I...I have butterflies and I'm a little scared, but I think I'm going to come out with flying colours.'

E(group member): 'You're going to get it!'

D: 'Go get 'em, tiger!'

A: 'That's right. That's it.'

The last stage of the group is called affirmation by Tomasulo (1992). The purpose of this stage, Tomasulo states, is to identify positive aspects of the members taking part in the enactment and noting each group member's contribution. This stage is closure-oriented and is designed to allow members to feel good about themselves upon leaving and to enable them to return to the routine of their day without excessive emotional overload. This last stage lasts approximately 5 to 10 minutes.

The group members were eventually able to give each other affirmation for what each of them had done in the group, for attending, for feedback, and for specific help received from another member. Even if negative feelings were exchanged and not much resolution had occurred yet, during the affirmation stage members would find something positive about the interaction. For example: acknowledging bravery in being assertive, trying, or at being able to express feelings. The group members also did not forget the therapists during this stage.

The stages of warm-up and sharing, enactment and affirmation were retained as the groups wore on, but their order did not necessarily remain. An enactment may evolve out of a warm-up and sharing of a particular member because of pressing issues related to the problems discussed. Affirmation of the protagonist's and member-helpers' participation always followed each enactment and sharing pairing. Then the group might return to a short orientation stage, or eliminate that stage altogether and go directly into another warm-up and sharing level which may evolve into another enactment, and so forth. This cycle encompassed most of the time spent in the group sessions. Warm-up and sharing seemed to be allocated the balance of the group time. One or two enactments occurred in each group and took approximately 10 to 15 minutes in total.

Group sessions lasted between one hour and one hour and a half for the first 10 sessions. The latter sessions were kept closer to an hour. The last session was composed of two parts: a regular group followed by member and therapist completion of the GCQ. Then there was a short break, after which the group reassembled for a good-bye session of 30 minutes. This session was not included in the data analysis. This session consisted of affirmation from therapists to members, but mostly among members about specific personal accomplishments in the group. Members also volunteered information about themselves which related directly to their stated (on the Target Goals) and unstated goals for therapy. They spoke of the future, exchanged phone numbers and said a final good-bye. They described this last part of the sessions as 'graduation'.

The co-therapists each viewed the video training package (Tomasulo, 1992) at least twice and read the accompanying training manual, discussing the material with Dr. G. K. (supervising psychologist) afterwards and among themselves before any group sessions began. Both therapists had had group experience before. C. H. had had psychodrama experience in a group setting with adolescents.

The fifth group session was viewed with prior verbal permission of all of the group members by Dr. Frank Shen, psychologist who has been trained in psychodrama . After the group session Dr. F. S. provided the co-therapists with feedback concerning the leading of the group and its processes - and how the leaders could improve. Guidance was provided regarding the following areas: ending on time; not giving special attention after group to certain individuals and treating the group equally; timing and effectiveness of initiating enactments, orientation segments and affirmation; and specific areas of process that had been missed by both therapists in session five and which demanded attention.

The author benefited from weekly supervision sessions with Dr. G. K. in which the group, its processes, problems and individual concerns were discussed. Dr. G. K. viewed each group session on video tape the day after the groups had been held. C. H. benefited from more infrequent supervision sessions with Dr. G. K. than the author did, as Mr. C. H. was working full-time.

The co-therapists met for one hour after each group session to discuss and record case notes for each member of the group. Notations were made which outlined what each individual group member had done in each group in the opinion of the co-therapists. This procedure assisted the therapists with the conceptualization of the group and individual goals, accomplishments, dynamics, and processes. Each notation encompassed one paragragh to one full page of lined binder notepaper.

After each group session the co-therapists also discussed and recorded the following for each session: (a) attendance; (b) the dominant theme of the group; (c) defenses evident; (d) conflict(s) observed; (e) affect observed; (f) compromises or resolutions evident; and (g) an approximate time allotment summary for the stages of orientation, warm-up and sharing, enactment and affirmation. This process also aided in conceptualizing the group as a whole. A summary of what was recorded during this process is included in the post hoc result section.

The co-therapists met twice formally throughout the run of the group sessions to discuss leadership, their use of the model and how their use of it could be improved and modified according to the group's needs and strengths. These points were informally discussed before and after each group session as necessary. Two major points which were shared by the co-therapists and worked on throughout the progression of the sessions were: (a) timidness in initiating enactments and some therapeutic interventions, (b) confident use of the Interactive-behavioral model was lacking because of prior psycho-analytic/non-directive based group training and practice and because of limited exposure to and practice with Tomasulo's (1992) model. The co-therapists also met formally after the group session had ended to summarize their participation in this project and to evaluate their co-therapy. A summary of the co-therapy evaluation is included within the 'Implications' section of this paper.

Instruments

The assessment devices used within this study were selected because the author felt that they could be used by all members of the group and possibly modified for narrative administration if necessary. Straight-forward, simple questions which are easy to understand yet cover complex human areas of interpersonal learning seem to characterize the tone of all devices selected.

None of the devices were specifically designated by the authors for use with people who possessed diagnoses of developmental disabilities. However, this author is not aware of any assessment devices appropriate to a study of group therapy which have been made for the use of an integrated group of subjects. Valid measurement of change in the integrated group, therefore, posed a problem for the author.

For the purposes of the present study, assessment of positive change was manifested in several measures of interpersonal learning as recommended by MacKenzie (1990). MacKenzie recommends that the follwoing criteria be considered to measure change: "1) multiple measures representing different aspects of functioning, 2) a combination of subjective impressions and objective behavioral measures, 3) individualized measures along with standardized instruments, and 4) several sources of assessment information" (MacKenzie, 1990, p. 265).

The variety of areas measured in outcome tests were hoped to help alleviate the complications outlined by Beutler and Hamblin (1986) present in self-report and observer infered evaluatory devices which could affect the validity of the test results. In the process measures, two different devices were utilized as well as a variety of types of raters.

The individual outcome assessment devices which were used in this study are: (a) the Brief Symptom Inventory (BSI), (b) the Social Adjustment Scale - Self Report (SAS-SR), and (c) Target Goals. Group process indicators which were used were the Group Climate Questionnaire (GCQ) and the Hill Interaction Matrix - Group Form (HIM-G).

The BSI scale (Derogatis, 1982) involves subject rating of 53 problem statements on a Likert descriptor scale involving degree of distress which ranges from 0 (not at all) to 4 (extremely).

The SAS-SR (Weissamn & Paykel, 1974) involves selection by the subject between 4 to eight descriptors regarding 51 questions related to various role functions. Some questions are eliminated if they do not apply to each particular subject.

The Target Goals Form (MacKenzie, 1990) involves subject rating of goals created by the subject on a Likert scale ranging from 0 (not at all) to 6 (extremely) regarding assessment of how much each goal is bothering the subject at the time of assessing the said goals.

The GCQ (MacKenzie, 1990) is a questionnaire which asks the raters to evaluate 12 group process statements on a Likert scale which ranges from 0 (not at all) to 6 (extremely).

The HIM-G (Hill, 1969) is a questionnaire which asks raters to evaluate descriptors regarding group process, style, content and member and therapist participation on Likert scales which range from 0 (not at all) to 6 (40% to 100% of the time) or 0 (no members) to 6 (eight or more members).

All outcome and process devices completed in the current study by group members were first tested by a paid consultant who shared demographics with the group members who reported possession of a diagnosis of developmental disability, and who could not read. All tests were completed within two and one half hours. No difficulty in understanding the questions or missing of answers was observed. The results of the testing were within the range of the pretest results observed for the actual subjects. The testing of the measures before the group members used the devices gave the author the opportunity to 'try out' modifications planned for subjects who had difficulty reading.

The scores reported for all tests are scores derived according to the test manuals except for the GCQ scores, for which raw scores were analyzed instead of T scores.

The Brief Symptom Inventory (BSI)

The BSI involves evaluation of the subject's opinion of his or her psychological distress. Derogatis (1982, p. 4) states that the BSI was "designed to reflect the psychological symptom patterns of psychiatric and medical patients as well as community non-patient respondents." The BSI is said to be designed to be interpreted at the global level, the dimensional level, and the discrete symptom level. Derogatis states that the BSI is one of a series of tests and rating scales (The Psychopathology Rating Scale Series), but is also a free-standing instrument.

The BSI is the brief form of the SCL-90-R (Symptom Check List - Revised). The correlations between the two tests across the nine shared symptom dimensions range from .99 to .92 (Derogatis, 1982). Convergent validity correlations on symptom dimensions of the BSI with the MMPI were reported by Derogatis to be convergent in a reanalysis of a study which compared the SCL-90-R with the MMPI scoring for the BSI instead of the SCL-90-R (Derogatis, 1982). The correlations for the BSI dimensions with comparable MMPI scales as well as the Wiggins Content Scales (Wiggins, 1966) and the Tryon clusters (Tryon, 1966) ranged from .30 to .72. Derogatis asserts that some reductions in magnitudes of coefficients reflected some loss of reliability because of the shortening of the scales from the SCL-90-R to the BSI, but convergent patterns of relationship were retained (Derogatis).

The internal consistency reliability coefficients observed from the nine dimension scores of a sample of 719 psychiatric outpatients using Cronbach's alpha are reported by Derogatis (1982) to range from .71 (Psychoticism) to .85 (Depression). The test-retest reliability coefficients observed from the nine dimension scores plus three global scores of a sample of 60 non-patients across an interval of two weeks is reported to range from .68 (Somatization) to .91 (Phobic Anxiety). The Global Severity Index (GSI) global score is reported to evidence a stability coefficient of .90.

Apparently the BSI has been utilized for screening and triage in medical and industrial settings and epidemiologic research, with debilitated patients and in protocol-driven clinical trials where multiple outcome measures are used - especially where time restrictions of evaluations are a factor (Derogatis, 1982).

Derogatis (1982, p. 8), the test's author, asserts that the BSI is not appropriate for people "who clearly breach the 'inventory premise' (eg., delirious, retarded, or floridly psychotic individuals)" and he states that people who fall into these categories are "probably not good candidates for valid administration of the BSI, or for that matter, any self-report inventory." However, Derogatis does describe a "Narrative Administration" (1982, p. 7) which involves administering the test in narrative mode when a physical difficulty prevents the respondent from physically completing the test. Derogatis says that "Several comparisons of 'self report' versus 'narrative report' administrations of the scale have not revealed any consistent biases associated with the technique" (1982, p. 7).

At the risk of some questionable invalidity, this author has utilized the BSI with a population which Derogatis excludes. The reasons for this use, over and above the obvious discriminatory points, include a study done by Gan, Tymchuk and Nishihara in 1977 which found that those diagnosed as mildly developmentally handicapped have the insight and the ability to answer an attitude questionnaire. Accurate information about developmental disabilities and a realistic attitude toward needs and abilites were demonstrated by the subjects. The group of people within the present study who completed the BSI fit into the psychiatric outpatient category described by Derogatis, except for the fact that some of them possess a diagnosis of developmental disability as well. The people who completed the BSI and who had reported that they were in posession of a diagnosis of developmental disability seemed to have no more difficulty understanding and answering the questions of the scale than did the people in the study who did not report possession of such a diagnosis.

In addition the BSI (as well as the SAS-SR, the Target Goals and the GCQ-S) was tested by a paid consultant who was male, in possession of a diagnosis of developmental disability and who could not read. This person seemed to have no difficulty understanding and completing the BSI in the narrative fashion described in the 'Recording Procedures, Outcome Measures' section of this paper.

The following Brief Symptom Inventory (BSI) scores will be reported: the primary symptom dimensions (Somatization, Obsessive-compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation and Psychoticism); and the global indices (the Global Severity Index, the Positive Symptom Distress Index and the Positive Symptom Total).

The Global Severity Index (GSI) is said to measure the subject's distress level by combining information regarding numbers of symptoms and distress intensity. The Positive Symptom Distress Index (PDSI) is described by Derogatis (1982) to reflect the average level of distress that the subject experiences, and the subject's style of experiencing distress (either minimizing or exaggerating distress experiences). The Positive Symptom Total (PST) shows the number of symptoms that the subject reports experiencing and, says Derogatis, can aid in communicating the extent of emotional distress when used in conjunction with the other global measures (GSI and PSDI).

The BSI is described as providing information on nine primary symptom dimensions. The first dimension, Somatization, describes distress related to perceptions of bodily dysfunction. Some of these perceptions are cardiovascular, gastrointestinal, respiratory, pain, discomfort and anxiety. The BSI's author, Derogatis (1982), asserts that this dimension has been demonstrated to be highly associated with problems with functional etiology although it may also include manifestations of organic disorders.

The second dimension, Obsessive-Compulsive, "focuses on thoughts, impulses and actions that are experienced as unremitting and irresistible by the individual, but are of an ego-alien or unwanted nature" (Derogatis, 1982, p. 10). The third dimension of Interpersonal Sensitivity involves feelings of inadequacy and inferiority especially as compared to others. The fourth dimension, called Depression, is described by the author to reflect indications representative of clinical depression. These indications include dysphoric mood and affect, feelings of hopelessness, and suicidal ideation. The fifth dimension, Anxiety, describes nervousness, tension, panic attacks, feelings of terror, feelings of apprehension, and some somatic correlates of anxiety. The sixth dimension, Hostility, involves characteristic thoughts, feelings or actions which may indicate the negative affect state of anger such as aggression, irritability, rage and resentment. Phobic Anxiety, the seventh dimension, is said to reflect irrational and disproportionate fear responses to a person, place or object which may lead to avoidance or escape behavior. The eighth dimension, defined as Paranoid Ideation, is said to represent a disordered way of thinking characterized by projective thought, hostility, suspicion, grandiosity, centrality, fear of loss of autonomy or delusions. The last and ninth dimension, Psychoticism, is described by Derogatis (1982) as reflecting a graduated continuum from mild interpersonal alienation to dramatic evidence of psychosis.

Additional items which contribute to the global scores on the BSI are described as reflecting the following: poor appetite, trouble falling asleep, thoughts of death or dying, and feelings of guilt (Derogatis, 1982).

The Social Adjustment Scale - Self Report (SAS-SR)

The SAS-SR (Weissman & Paykel, 1974) assesses functioning in different societal roles: work (as an employee, student or involving housework), relationships with one's extended family, marital roles, parental roles, social and leisure activities, and economic independence. The scale was derived from the Social Adjustment Scale - Interview (SAS). Weissman and Bothwell (1976) report a Pearson r comparison between the interview format and the self report regarding role areas and the Overall Adjustment score to range from .40 (Family Unit) to .76 (Marital Role). The correlation for the Overall Adjustment score was .72.

The major contents of the SAS, from which the SAS-SR was derived were obtained from the Structured and Scaled Interview to Assess Maladjustment (SSIAM) (Gurland et al. 1972); (Weissman, 1978).

The SAS was originally used to assess social functioning in depressed patients which might be sensitive to either drug treatment or casework psychotherapy (Weissman et al, 1990). Correlations between SAS-SR ratings for the scores of fifteen patients were as follows: (a) between patient and interviewer .70, (b) between patient and informant (close associate) .74, and (c) between informant and interviewer .54. No significant differences were reported between means on any of the comparisons (Weissman & Bothwell, 1976).

Sensitivity to change was tested through comparing the social adjustment scores of depressed outpatients involved in psychopharmacologic treatment before treatment, at the height of illness, and after four weeks of therapy when most patients had recovered. Highly significant improvements were reported in social adjustment over the span of treatment (Weissman & Bothwell, 1976).

Scores reported for the Social Adjustment Scale - Self Report (SAS-SR) are Role Areas of Work (Outside Home, at Home, and as a Student), Social and Leisure, Extended Family, Marital, Parental, Family Unit, and Economic. An Overall Adjustment score is calculated from the role area scores (Weissman, 1978).

The subjects are asked to answer questions related to the above dimensions with reference to the last two weeks of their lives regarding their functioning in a number of social roles. Subjects answer questions about their level of education and occupation and the level of education and occupation of the head of their household. Subjects also answer questions regarding their age, sex, marital status, financial status, type of work, and time spent at work. Subjects are asked how well they think they have done their work, if they have argued with people at work, if they have been upset at work and if they have found their work interesting. Subjects answer questions about how many friends they have spoken to and how often they have socialized in the last two weeks and if they have talked about their feelings to their friends. They are also asked how much time they spend on hobbies, whether they have argued with friends and if they have been hurt by a friend, as well as if they have felt uncomfortable, lonely or bored. Questions are answered about how often the subject dates or wants to date. Specific details are asked about family relationships (arguements, talking about feelings, avoiding contacts, dependence, anger, worry, and whether the subject feels let down by or as if they have let down their family in any way). Details about spousal relationships are also asked (arguments, talk about feelings, demandingness, dependence, how the subject feels about the spouse, frequency of intercourse, feelings about it and possible problems experienced). Questions asked about children range from interest in what the subject's children are doing, talking and listening to the children, and getting along to feelings toward the children.

Target Goals

The Target Goals (MacKenzie, 1990) provides a subjective self-report interval review of the course of therapy and goal assessment by clients and therapists and to aid in establishing directions for treatment. In the present study, rating by clients was utilized.

MacKenzie and Dies (1981, p. 22) state that recent psychotherapy research literature has "increasingly emphasized the need to identify specific goals for therapy." They say that this recognizes the fact that "many standard tests measure dimensions which are irrelevant for some patients and may miss issues of considerable personal concern to the individual" (p. 22). MacKenzie and Dies present a Target Goals form in the CORE Battery (1981) which asks the subjects to list three of the most important goals that they would like to work on during therapy - expressed behaviorally. The subjects are then asked to rate each goal on a Discomfort scale (how much the problem bothers the subject) which ranges from 0 (not at all) to 5 (could not be worse). The subject is then asked to rate each goal on an Expectations Scale (how much improvement the subject expects to make) which ranges from 0 (none) to 5 (total improvement). An Achievement scale is completed later after some treatment. The scale asks the subject to rate to what degree they have attained their goal(s). In the present study the Achievement scale was rated once in the middle of the therapy sessions and once after therapy had ended.

The Expectations and Achievement scales are not directly comparable in the Target goals contained within the CORE battery because the scaling is slightly different. The ratings are essentially the same. The Expectations scale is listed following, regarding expected improvement: 0 = None, 1 = Very Little, 2 = Some, 3 = Quite a bit, 4 = A great deal, 5 = Total improvement.

The Achievement scale is 0 = Worse, 1 = None, 2 = Very Little, 3 = Some, 4 = Quite a bit, 5 = A great deal, 6 = Total improvement (MacKenzie & Dies, 1981). A change in the Achievement scale was made in order to allow direct comparison between the two scales in the data anlysis of the current study. Because none of the subjects of the current study marked the Achievement rating of '0 = Worse', the two scales were made to configure through eliminating the 'Worse' category.

Face validity is present in the Target Goals in the asking of each subject to provide their own goals and to rate them periodically. This author has found no reliability studies of the Target Goals.

Target complaints were reported to correlate significantly with four other outcome measures in a controlled study on psychotherapy (Battle et al., 1966). Battle et al. assert that when target complaints are properly elicited they can be obtained reliably from the patient and do not change in their main content, nor in the severity of ratings throughout an intensive psychiatric interview. The authors also stated that in the post interview situation, patients who had established target complaints previously seemed to have formulated their complaints in a more precise way. Also the authors (in a pilot study) had rated all target complaints regarding whether or not the patients took responsibility for the complaints. When they later checked which patients had been offered psychotherapy they reported that a significant relationship between acceptance in psychotherapy and the willingness of a patient to accept some responsibility for their dilemma was found (Battle et al., 1966).

The Group Climate Questionnaire (GCQ)

The GCQ (MacKenzie, 1990) provides measurement by the means of twelve items of group climate and general interactional tendencies rated by individual group members, therapists and/or outside observers based upon overt group behavior. The following three subscales are built into the GCQ: Engaged (meaning a positive working environment), Conflict (meaning a negative atmosphere with anger and distrust), and Avoiding (meaning avoidance of personal responsibility for group work) (MacKenzie, 1990).

MacKenzie (1990), the scale's author, states that group climate is constantly shifting and is an important way of conceptualizing a group. He says that the overt behavior displayed within a group has a major impact on what members are likely to do including whether or not therapeutic or destructive events will occur.

Factor analysis of the original thirty-two item long form of the GCQ (GCQ-L) is reported to have revealed the following eight scales which are rated on a seven-point Likert scale: Engagement, Support, Practicality, Disclosure, Cognition, Challenge, Conflict, and Control. Item-scale correlations for internal consistency of each scale had a mean of .70. Only three items were reported to correlate at less than .54 with the hypothesized scale; and one item correlated at greater than .50 on a scale other than the hypothesized one. Generally independent scales were indicated with one exception of .75 (Disclosure and Practicality). Varimax rotation is reported to have revealed seven interpretable factors. A cut-off criterion of .50 for item loading is reported to have given support for the hypothesized scale structure (MacKenzie, 1981).

The GCQ-S (Group Climate Questionnaire - Short Form) was derived from the GCQ-L by selecting high-loading items and collapsing the "work" scales (Disclosure, Cognition, and Challenge) (MacKenzie, 1983). Factor analysis and percent of variance are reported to have been used to develop the three scales of the GCQ-S using a .50 factor loading and deletion of items which loaded strongly on more than one factor. One hundred and nineteen psychiatric outpatients in 15 groups (67 women and 52 men - aged 20 to 45 years) were subjects using the scale in this study. Item-scale analysis is reported to have identified items to be used to calculate scale scores. The range is reported to have been .88 to .66. Interscale correlations for the three scales are reported to range from .30 to -.44 (MacKenzie, 1983).

An 81% compliance rate is reported to reflect the GCQ-S's acceptability to group members (MacKenzie, 1983). MacKenzie (1981) reports that a review of the scale results with individual therapists supports construct validity. Factor structure and item means were reported to be essentially the same as the 1983 study in a 1987 study composed of 54 two-day training groups with 28 specific interest groups and 26 psychodynamic process groups for graduate students, residents, advanced therapists, and instructor-designates (MacKenzie et al. 1987).

The Group Climate Questionnaire (GCQ) which is referred to in the present study is actually the GCQ-S with the name shortened to 'GCQ' for the sake of brevity. MacKenzie himself refers to the GCQ-S in his 1990 publication as the 'GCQ'.

The GCQ asks for rating along a Likert Scale which ranges from 0 (not at all) to 6 (extremely) at the end of each group on questions which ask whether members liked and cared about each other, tried to understand why they do things, avoided looking at important issues, felt that what was going on was important and there was a sense of participation, depended upon group leaders for direction, experienced anger and friction, were distant from each other, challenged and confronted each other in order to sort things out, seemed to do things the way they thought would be acceptable to the group, rejected and distrusted each other, revealed sensitive personal information, and appeared tense and anxious (MacKenzie, 1990).

The Hill Interaction Matrix - Group Form (HIM-G)

The HIM-G (W. F. Hill, 1969) is a measure of group Content/Style (Topic, Group, Personal, and Relationship); group Work/Style (Responsive, Conventional, Assertive, Speculative and Confrontive); and therapist activity through the rating of seventy-two descriptions of group behaviors by an observer, leader or group member after viewing a video tape or reading a transcript of a group. All dimensions described above are presented in a matrix of sixteen cells.

Work began upon development of the HIM in 1954 for William Fawcett Hill and Ida S. Coppolini (W. F. Hill, 1965). The HIM-G is based upon, and is intended to replace, the statement-by statement content analysis ratings of the HIM (Hill Interaction Matrix).

Two basic dimensions are reported by W. F. Hill (1977) to have been empirically derived from studying a number of therapy groups and which, he says, seem predominant in distinguishing various groups. These two dimensions interact in the matrix. Both dimensions are described as 'Styles'. The Styles have a therapeutic value assigned to them in the matrix cells which is reflective of a value system. The three major determinants of the value system are: member-centeredness of the verbal statement, interpersonal threat undertaken by the speaker, and the degree to which a therapist role is assumed by the speaker. The deeper the verbal statements seem to reflect these levels, the higher a therapeutic index is assigned (Burch, 1975).

One dimension deals with content (Content/Style). This dimension has four categories: Topic (I), Group (II), Personal (III), and Relationship (IV). Categories I and II are described as non-member centered levels. In the Topic (I) area discussion is usually about topics outside of the group. It is said to have little therapeutic value. The Group (II) area involves talk about the group and what the group is doing. The Personal (III) area is defined as the first member-centred level. Here members talk about themselves, personal concerns or relationships outside of the group. This level is said to be the content level at which members uncover and obtain insight. The Relationship (IV) level is the highest content level because members talk about each other in the 'here-and-now' and are said to take the greatest personal risk (Burch, 1975).

The second dimension deals with the concept of 'Work'. Work is said to occur when someone "is taking the role of the patient and actively seeking self-understanding" (W. F. Hill, 1965, p. 24). The first two categories of work are labelled 'Pre Work'. The first of these is Responsive (A) which is used "with regressed or retarded patients when trying to get them to react and act as social beings. No interaction categorized at this level is assigned therapeutic value by Hill" (Burch, 1975). For the present study, it was deemed that we had no need for this category in the therapeutic group analysis.

The second Pre Work category is Conventional (B) which is described as the level of most social intercourse where no behavioral data about the members speaking is revealed. W. F. Hill is said to value this level which secures socialization and develops relationships among group members. Assertive (C), the third Pre Work category, describes interactions which are acting-out or anti-group verbal behaviors. Apparently a member may be talking without really desiring help, may be trying to dominate others or be challenging others for help. Considerable personal threat is involved with this level (Burch, 1975).

The first Work level is Speculative (D) which is descibed as characterized by a problem orientation where a person seems to be searching in a somewhat intellectual way for information about themselves. The speaker is said to define and delimit the problem and other group members operating at the same level accept this. Confrontive (E) is described as the highest level of Work. Members are described as being helped by helping others and by taking the therapist role. The greatest personal risk is involved at this level because of possible refusal of help offered or a striking back. This level is said to build upon ego-strength because of the abandonment of security involved. W. F. Hill is said to see this level of interaction as the goal of group psychotherapy (Burch, 1975).

The HIM-G does not give information on individual members' preferred style and content of interacting, only on the group as a whole and leader behaviors. Each of the 16 matrix cells has four statements describing a given behavior with four emphases: trainer sponsored behavior, trainer encouraged or maintained behavior, member behavior (number of members), and member behavior (proportion of time). There are also four items for the A-level and four non-specific items (three have to do with silence and resistance and one involves total volume of leader participation) (W. F. Hill, 1977).

Levels A to E (from lowest to highest value respectfully) of the Work/Style dimensions form the vertical axis on the matrix. The horizontal axis is formed by the Content/Style dimensions of I to IV (from lowest to highest value respectfully).

From the two axis, 16 cells (for example: I B, II B, III B, IV B, I C, II C, and so on) can be formed, each containing four questions as described above.

The matrix is then divided into four Quadrants. The first Quadrant is composed of cells: I B, II B, I C, and II C. The second Quadrant is made up of: III B, IV B, III C, and IV C. The third Quadrant contains: I D, II D, I E, and II E. Finally the fourth Quadrant is composed of: III D, IV D, III E and IV E.

Therapist Activity, the Risk Ratio, the Intra-group Ratio, and the Quadrant Ratios are scores calculated from the matrix. Therapist Activity reflects the amount of participation from the therapists throughout all of the dimensions. The Risk Ratio is the volume of participation in Assertive and Confrontive compared with the volume in Conventional and Speculative (W. F. Hill, 1969). The Intra-group Ratio is the volume of Topic and Personal participation compared to the volume of Group and Relationship. The Quadrant scores compare the volume of participation in each quadrant with the other three quadrants.

The ratings of groups with the HIM conducted by representatives of classic schools of psychotherapy are reported by W. F. Hill (1965) to yield psychometric profiles which accurately reflect the styles of interaction attributed to these schools.

W. F. Hill (1977) indicates that the validity of the HIM rests upon its utility - he includes a bibliography of 143 studies which use the HIM in his 1977 publication. Many more studies have been added to that bibliography since 1977.

The HIM mean reliability indices for three judges rating three groups reported by Fuhriman and Packard (1986) was 70% agreement. The product-moment correlation was .76; and the rank order correlation was .90.

A study by Powell (1977) which examined the degree to which the items in each HIM-G matrix cell were correlated reports that regardless of which correlation method is used, the table of specifications does not hold up. However, Powell states that perhaps the methods of correlation were not satisfactory or the sample was atypical.

W. F. Hill (1977) reports interrater study results for the HIM-G as a rho of above .80.

As W. F. Hill asserts in his 1965 publication, the norms are better described as reference data rather than norms in the psychometric sense. Apparently the reference data is based upon a sample of fifty group therapy protocols, each having a different therapist and rated on the HIM statement-by statement basis by P. S. Hill (1964). The reference data is described by P. S. Hill as diverse, although not random because it drew heavily from the files of therapists known to the author. The diversity in the reference data is decribed by P. S. Hill regarding the characteristics of the groups and the therapists.

The groups range from prison groups, family groups, analytic groups, university students and client-centred groups, etc. (see W. F. Hill, 1965). The therapists' backgrounds were described as chaplains, psychologists (Ph. D, Ed. D. and M.A.), psychiatrists and social workers and included both males and females with varying years of experience. The therapists' percent of participation in the groups varied as well.

It must be noted that the reference data used within this analysis of the HIM ratings is dated, and may not be currently representative of group therapy processes. P. S. Hill is now in the process of accumulating transcripts of groups from which to update the reference data and to create new 'norms' for the 1990's (personal communication, April, 1993). Also the reference data used are based upon the statement-by statement analysis using the HIM. The current study utilized the HIM-G, which was developed with the intention of replacing the statement-by statement ratings (W. F. Hill, 1969). The percentile norms can be applied to HIM-G results with some validity since the HIM-G correlates over 0.90 with scores from the content analysis system (Pfeiffer, Heslin, & Jones, 1973). Table 3 indicates the means and standard deviations calculated from P. S. Hill's reference data (1964).

Table 3

Score Means and Standard Deviations Calculated from HIM Reference Data

Content/Style	*M*	*SD*
I	23.21	17.16
II	12.04	10.76
III	45.52	21.92
IV	21.00	16.96
Work/Style		
B	30.70	20.57
C	14.84	12.68
D	50.38	19.74
E	6.10	5.27
Quadrant/Style		
1	18.88	12.92
2	16.08	15.50
3	25.92	13.17
4	40.80	20.10
Therapist Activity		
	17.56	11.21

Note. Scores are expressed in percentages.

Recording Procedures

The administration of the outcome measures was individual. Table 4 presents scheduling of individual outcome measures over the total time span of the study. Table 5 and Table 6 outline the scheduling of process measures.

The individual outcome measure answer sheets (BSI, SAS-SR and Target Goals) and the Group Climate Questionnaires which were filled out by group members and co-therapists were marked with a number which corresponded to a legend sheet to identify group members and therapists. The legend sheet was destroyed after the data analysis to ensure confidentiality. Group process measures were also coded with numbers which corresponded to legend sheets (which were later destroyed) to identify observer-raters.

Each group session was video taped with the express permission of the group members (see consent sheets in Appendix A). The video taping began when group members entered the group room and the session began, and ended at the end of the session when members left the group room.

Four cameras, placed at strategic areas of the group room so as to acquire the best view of the entire group were used. The cameras were fixed so any noise of their movement would not distract the group members.

Table 4

Outcome Measures Research Design

	Observation Times				
	Pre		During		Post
	1		2		3
(BSI, SAS-SR)	II O	X		X	O
(TG)	II O	X	O	X	O

Note. Pre = pretests; During = during group sessions; Post = posttests; II = initial interview; X = four weeks of treatment (eight group sessions) - second 'X' includes one extra session; O = testing outcome; BSI = Brief Symptom Inventory; SAS-SR = Social Adjustment Scale - Self Report; TG = Target Goals.

Table 5

Process Measures Research Design: Group Climate Questionnaire (GCQ)

	Observation Times									
Group Members, Therapists and Observer-Raters		1		2		3		4		5
	X1	O	X	O	X	O	X	O	X	O

Note. GCQ scores for which results were gathered are: Engaged, Conflict and Avoiding. Observation Time '2' of the GCQ was not completed for the group members. X1 = initial group session; X = four group sessions or treatments; O = evaluation of GCQ.

Table 6

Process Measures Research Design: Hill Interaction Matrix - Group Form (HIM-G)

		Observation Times								
		1		2		3		4		5
Observer-Raters	X1	O	X	O	X	O	X	O	X	O

Note. HIM-G scores for which observations were gathered: (a) Content/Style: Topic (I), Group (II), Personal (III), Relationship (IV); (b) Work/Style: Responsive (B), Assertive (C), Speculative (D), Confrontative (E); (c) Quadrant/Style: 1, 2, 3, 4; Therapist Participation; Risk Ratio; and Intra-Group Ratio. X1 = initial group session; X = four group sessions or treatments; O = evaluation of HIM-G.

Outcome Measures

The administration of the self report outcome measures (BSI, SAS-SR, Target Goals) were carried out by the author of the study under supervision. The administration occurred in the office space described in the 'Setting' section of this proposal.

The administration of the outcome tests occurred according to the design presented in Table 4 of this proposal. The Target Goals device was administered once before the group began, once four weeks into the group treatment and once after the group sessions had ended. The evaluation schedule necessitated seventeen sessions in order to give five evaluations. For this reason, the Target Goals mid-point administration was given at the approximate mid-point of the sessions (after the eighth group). If the Target Goals device was to be administered at the exact mid-point of the sessions, it would have had to have been given half-way through the eighth session.

There were two administrations of the BSI and the SAS-SR. One administration was during the informal interview, before the group sessions began, and the other was after the group sessions had ended.

The pretest outcome measures were given to all subjects within the week prior to the start date of the group sessions. The posttest outcome measures were given to all subjects within the week immediately after the end of the group sessions. The day of the week and the time of day of the corresponding pretest - posttest measures administrations were approximately the same for all administrations - within one or two hours. The administrations the outcome measures at pretesting and posttesting times lasted an average of three hours for each subject. The scoring of tests was not done until the therapy was completed.

The self-report measures proposed for use within this study were modified in their administration for group members who are not adept at reading and writing. A major concern regarding these possible modifications is the acquisition of unbiased, independent results which are not swayed by the administration procedure. Because each individual outcome measure consists of statements which are rated on scales by the subjects, one type of modification was possible.

During the pre-group interview it was established through training with the Target Goals rating scale that the prospective subjects could indicate one choice on a rating scale measure through marking a point with a pencil or pen. On each measure or test, one question was made visible through blocking all others with a piece of paper. The test administrator was seated opposite the subject who was taking the test, so that the administrator was blind to any choices the subject made upon the test sheets. The administrator read each question on each test to the subject, if needed, and allowed the subject to mark the rating that they chose. Then the paper blocking the rest of the questions was moved down the test to the next question.

Each individual outcome measure was scored at least twice by the author to aid in preventing scoring errors. In addition, monitoring of the scoring for each measure by another psychologist was completed as an error check. If scoring errors were found, a third and fourth scoring of each measure occurred. Scoring procedures followed each test's accompanying manual.

Process Measures

The two process measures were evaluated by group members, therapists, and observer-raters once after the first group session, and then after every two weeks (or four sessions). The outside observer-raters evaluated the GCQ and the HIM-G within one week of the days the groups scheduled to be evaluated were held. The GCQ was completed at the end of the first group session and each following fourth session by all group members, co-therapists and observer raters according to the design presented in Table 5.

Process measure evaluations by group members and therapists

Training for completion of this measure occurred for the subjects during the pre-group interview or a subsequent scheduled appointment. This training consisted of the author and the subject 'pretending' that they had just finished the first group. They spoke of what might happen during the group, and the author asked each subject to fill out a 'pretend' GCQ. If the subjects did not seem to need to use the concept of 'pretending', they were simply asked to review the GCQ form and ask any questions they might have about it after the author had explained that they would be asked to fill it out after the first group session and each fourth group thereafter.

Reading of the 12 items on the GCQ to group members was necessary for some members who were not able to read. In this case, after the first group session, a procedure similar to the one outlined above regarding individual administration of outcome measures for those who have difficulty reading occurred with the group in the group room.

Each person filling out the questionnaire was directed to locate themselves within the group room on a chair away from other members and therapists, so that they could fill out the questionnaire without anyone being able to see their answers. This procedure included the entire group and not just those people who could not read.

A copy of the GCQ was projected upon a screen at the front of the group room and a paper was moved down the page as each of the twelve questions were read aloud by the author. After each question was read, the group members were instructed to mark their selection on the rating scale in front of them. If a group member had difficulty marking their scale, or understanding the reading, one of the therapists would move to assist them by individually explaining either the question or the scale - while not viewing the member's answer sheet.

The group members seemed to experience difficulty with this procedure and with the GCQ form - especially some of the members who could not read despite pre-training. Therefore completion of the GCQ was discontinued for the second observation time. However at the third observation time, completion of the GCQ was again attempted - this time eliminating the overhead projection of the form. Each member simply found a spot in the group room by themselves where they could not view any other member's answer form. They then completed the GCQ on their own. Members who had difficulty reading (conveniently there were only two) were assisted in a similar manner as the reading procedure for the outcome measures by the author and the co-therapist. This method seemed to work well and was continued for the subsequent two remaining group member observation times for the GCQ.

The co-therapists filled out the GCQ at the same time as the group members.

Process measure evaluations by observer-raters

Four outside observers were selected as raters of the two process measures. Two observer-raters evaluated the groups scheduled for observation using the GCQ and the two other observer-raters evaluated the same groups using the HIM-G.

Three of the observer-raters were Child Care Workers who have worked as group therapists for a minimum of three years under the supervision of group therapy psychologists and psychiatrists in a therapy program for children, adolescents and families in a large western Canadian city. One of the Child Care Worker observer-raters had completed an education degree at the bachelor's level and another was nearing completion of a similar degree. The third Child Care worker observer-rater was beginning a bachelor's degree at university. The fourth observer-rater was enrolled in a university Master's level counselling program.

Training for the observer-raters in the use of the GCQ consisted of verbal instruction and reading materials (MacKenzie, 1981, 1983). After this instruction, the observer raters were asked to listen to forty-five minutes of an audio tape of therapists involved in a group session (Weckler, 197?) and then to evaluate the group according to the GCQ. After this evaluation, the author and the two observer-raters discussed their evaluations and compared any glaring discrepancies between their two evaluations in order to clear up any misunderstandings of the wording of the GCQ.

Then the two observer-raters watched a video tape recording of undergraduate education students in a group session for a communication class. After watching the video tape, the observer-raters again completed the GCQ, this time to establish inter-rater reliability. No discussion of discrepancies was permitted following this GCQ evaluation. However, if the observer-raters experienced difficulty with the GCQ form during the time that they were to evaluate the groups scheduled for observation, they were encouraged to contact the author who attempted to answer any procedural questions without giving evaluation advice. If one of the raters contacted the author regarding a specific question, the author contacted the other rater and relayed the same information to them to ensure that each rater was given the same procedural instruction.

The training for the two observer-raters for the use of the HIM-G and subsequent establishment of inter-rater reliability was done in a similar manner as the procedure outlined for the GCQ. The observer-raters listened to the Weckler audio tape after receiving verbal and written instruction in the use of the HIM-G (Hill, 1961, 1969, 1977). Then they were instructed to evaluate the audio-taped group with the HIM-G; after which the two observer-raters and the author discussed their evaluations and reviewed any glaring discrepancies in their scoring in order that they could better understand the use of the HIM-G. The observer-raters then evaluated the video tape of the communication group of education students in order to establish inter-rater reliability with the HIM-G. The raters were encouraged to contact the author with any procedural concerns regarding the use of the instrument, as the observer-raters of the GCQ were encouraged to do. Each rater was given the same procedural information by the author.

Written consents were obtained from all participating undergraduate students viewed on the video tape of the communication group. The consent form is included in Appendix C. The video tape was returned to the instructor of the class for erasure, as was agreed upon after the observer-raters had viewed it.

All observer-raters completed their evaluations of the scheduled groups within two weeks of when each group was held. The raters were instructed to pick a day and a time that would be most convenient for each of them every two weeks in which to view the tapes and to fill out the rating forms. They rated the groups using the GCQ and the HIM-G in the same, natural order as subjects and co-therapists did who used the GCQ after each fourth session.

Table 6 indicates the research design undertaken for the HIM-G process measure.

Settings

The group room was located at the University of Alberta. It was painted a neutral off-white and was carpeted. It had video equipment for video-taping. Regular, plastic, moderately comfortable conference chairs were used. The group was seated in a circle.

The intent in this study was to keep the site of the group room the same throughout the group sessions in order to decrease the probability of unfamiliarity of environment becoming an intervening variable in the research, and to enhance the comfort of the clients/subjects. However, the room which was used for the first two group sessions was deemed by the group to be too small and noisy. Therefore, for the third and all group sessions thereafter, a more appropriate room was found.

The pre-group informal interview, pretesting and posttesting occurred for each subject in a single interviewing room in a clinic at the University of Alberta. Some subjects used different interviewing rooms than others in the clinic due to availability of rooms at the times the different interviews and testings were occurring. However, the rooms were furnished so similarly, that essentially no difference could be found between all of the rooms used. The interviewing rooms had neutral decor, no clutter, appropriate desk or table space, two or three office chairs, adequate lighting and heating for test-taking, and no disruptive noise.

Each subject returned to the same room that they had originally used for the pre-group informal interview for pretesting and posttesting. The exception to this was for the mid-point evaluation of the Target Goals, which was completed by each subject after the eighth group session within the group room.

It was decided that it would be too disruptive to have each group member move to the interviewing rooms (which were down five floors at this time) in order to complete the Target Goals. Therefore, each member completed the mid-point Target Goals rating after the eighth group in the same manner as they completed the GCQ. They moved to their own space in the familiar group room and rated their performance on their goals according to the scale - asking for procedural assistance from the therapists as necessary.

Analysis of Data

The analysis of data was composed of two basic parts. The first part had to do with analyzing the pretest and posttest data gathered from individual administrations of the BSI, SAS-SR and the Target Goals. The second part of the analysis involved analysing the data gathered from the process instruments (the GCQ and the HIM-G).

The first stage of the pretest-posttest analyses involved attempting to derive significant results from two-way Anovas in repeated measures designs for each test or rating scale which compare the scores of subjects who reported possessing a diagnosis of developmental disability and those who did not report possessing such a diagnosis.

The second stage of the first part of the data analysis involved attempts to derive significant z-score differences between pretest or posttest scores and test norms. For the BSI the test norms used were Psychiatric Outpatient norms, so a directional hypothesis was involved which attempted to find observed z-scores lower than the norms. For the SAS-SR, the norms used were Community Sample norms, so the directional hypothesis attempted to find z-scores which were not significantly higher than the test norms. For both the BSI and the SAS-SR, improvement was observed if scores are lower than previously measured. No norms were available for the Target Goals.

The third stage of the pretest-posttest part of the data analysis involved attempts to derive significant observations of lowering of scores of the BSI and the SAS-SR from pretesting to posttesting using two-way Anovas. Similar analyses involving the Target Goals had to do with attempting to derive significance in directional hypotheses using two-way Anovas regarding whether or not: a) the Achievement End-point rating of the interpersonal goals was observed to be higher than the Achievement Mid-point rating (indicating higher ratings of achieved goals at the end of therapy as compared to the middle of therapy), and (b) the Achievement Mid-point and End-point ratings were observed to be higher than the Expectations ratings (indicating whether or not expectations for goal accomplishments were exceeded or not in the middle and at the end of therapy).

The second part of the data analysis, involving the process instruments, attempted to derive significant differences between the mean scores of the five groups rated. For the GCQ, significant differences in the three process scores were examined across the five successive groups for different designations of raters. The different designations were as follows: all raters grouped together, all group members, group members who reported possession of a diagnosis of developmental disability, group members who did not report such a diagnosis, therapists, outside observers, and therapists and outside observers grouped together. Significant linear, quadratic and cubic trends were examined concerning the means of the successive group sessions and the different groupings of raters.

The HIM-G rating scores from two outside observers were examined over the five successive sessions to determine change over time regarding reference data percentile equivalents and through comparing the percent scores of: Therapist Activity, Intra-group Ratio, and Risk Ratio. The HIM-G rating scores were also compared to the reference data using z-tests in order to determine whether or not the observed ratings differ from the reference data (or an 'average' group).

Finally, an attempt was made to find significant trends in a correlation matrix made up of representative scores from all testing and rating evaluations presented in the order in which they occurred.

Post hoc explorations were conducted which examined incidences of therapeutic factors in the five group sessions evaluated (sessions 1, 5, 9, 13 and 17), and group themes were reviewed.

CHAPTER IV

RESULTS

This chapter includes the presentation of results relevant to the hypotheses and, in addition includes an exploratory, post hoc evaluation of data ('Exploring Therapeutic Efficacy' and 'Therapeutic Themes').

Organization of the Chapter

This 'Results' chapter is divided into four main parts. The first part focuses results of the individual outcome measures (the BSI, the SAS-SR, and the Target Goals). In the second part results of the inter-rater reliability evaluations of the process instruments (the GCQ, and the HIM-G) are reviewed. The third part is concerned with the analysis of process data. Each division is broken down further according to the hyptheses titles. The last major division of this chapter describes post hoc explorations.

Outcome Results

A. BSI Data Analysis

The number of subjects in the data analysis is reduced from 10 to 9 owing to one subject leaving the group after attending two group sessions.

1. Comparisons of independent variables.

A two-way Anova with repeated measures was performed on the BSI scores in order to examine the first hypothesis. The first hypothesis stated that no significant mean differences nor interaction effects would be found between the BSI scores of subjects who did and did not report possession of a diagnosis of developmental disability.

Table 7 indicates the means and standards deviations of the two groups at the two testing times. Figure 1 to Figure 12 graphically compare the means of the two groups for all BSI dimensions and global scores at pretesting and posttesting.

Although the table and the graphs of means may seem to indicate that people without a diagnosis of developmental disability may have scored higher on most BSI dimension and global scores (with the exception of both the pretest and posttest of Hostility and the posttest of Interpersonal Sensitivity), further examination was performed.

Table 8, Table 9 and Table 10 indicate the findings of the repeated measures design in a two-way Anova. Table 8 displays the results for the first five dimension scores on the BSI. Table 9 indicates results for the last four (of nine) dimension scores. Table 10 displays results for the BSI global scores.

Table 7

BSI Means and Standard Deviations for Subjects Who Did and Who Did Not Report Possession of a Diagnosis of Developmental Disability

	Diagnosis (*n* = 4)				No Diagnosis (*n* = 5)			
	Pretest		Posttest		Pretest		Posttest	
Score	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Somatization	0.60	0.93	0.46	0.65	0.97	1.01	0.52	0.61
Obsessive-Compulsive	0.92	0.87	0.58	0.74	1.60	0.82	1.27	0.56
Interpersonal Sensitivity	1.12	1.48	1.00	1.54	2.00	0.81	0.90	0.42
Depression	1.04	1.03	0.71	0.99	1.60	0.33	0.96	0.79
Anxiety	1.17	0.89	0.79	0.99	1.61	0.58	1.10	1.02
Hostility	1.25	1.18	0.70	1.04	1.00	1.02	0.52	0.54
Phobic Anxiety	0.65	0.79	0.20	0.28	1.28	1.06	0.72	0.97
Paranoid Ideation	1.35	1.28	0.75	0.84	1.72	0.74	1.04	0.74
Psychoticism	0.90	0.81	0.40	0.67	1.24	0.98	0.60	0.35
General Severity Index	0.99	0.95	0.61	0.83	1.38	0.73	0.86	0.55
Positive Symptom Total	28.50	13.48	18.50	17.71	36.80	11.26	29.60	13.59
Positive Symptom Distress Index	1.61	0.73	1.34	0.62	1.89	0.58	1.45	0.27

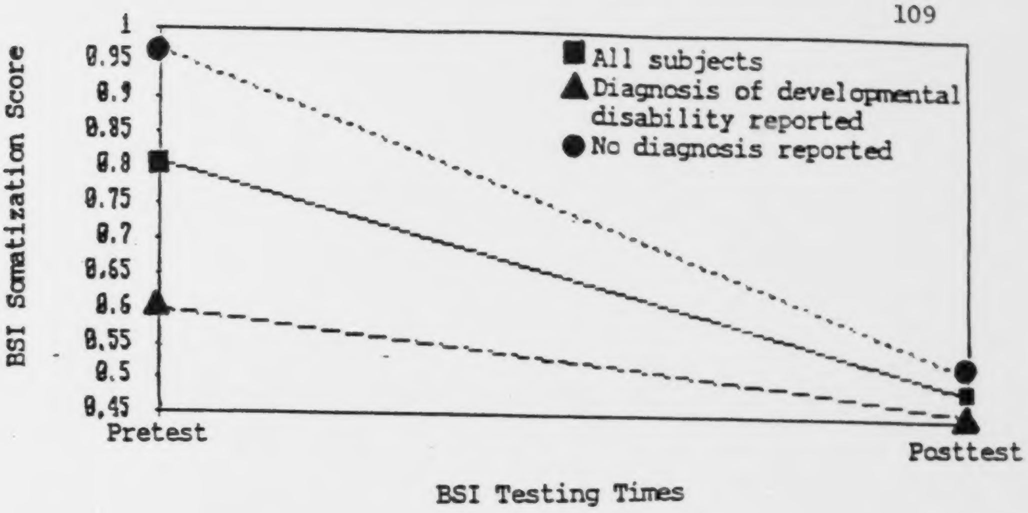


Figure 1. BSI Somatization mean pretest and posttest score comparison.

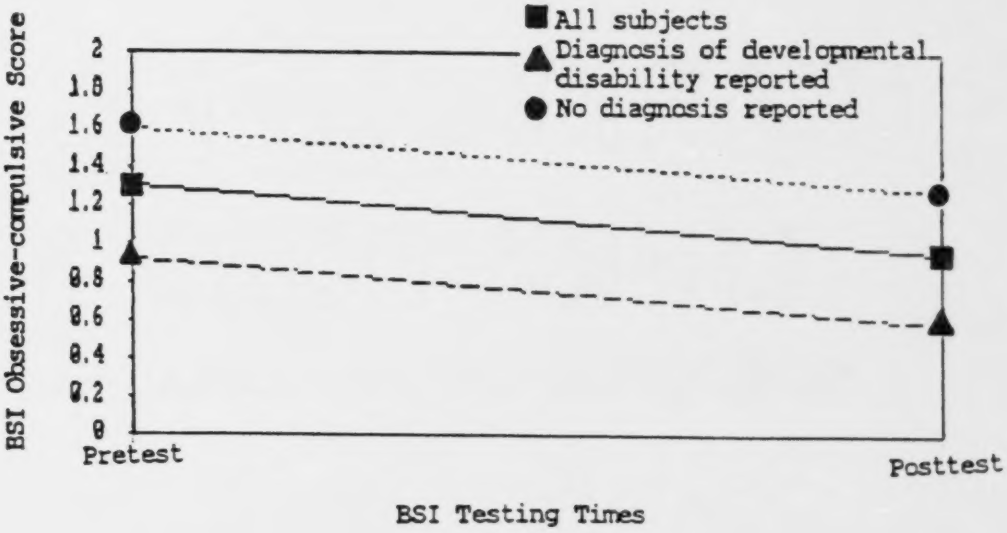


Figure 2. BSI Obsessive-compulsive mean pretest and posttest score comparison.

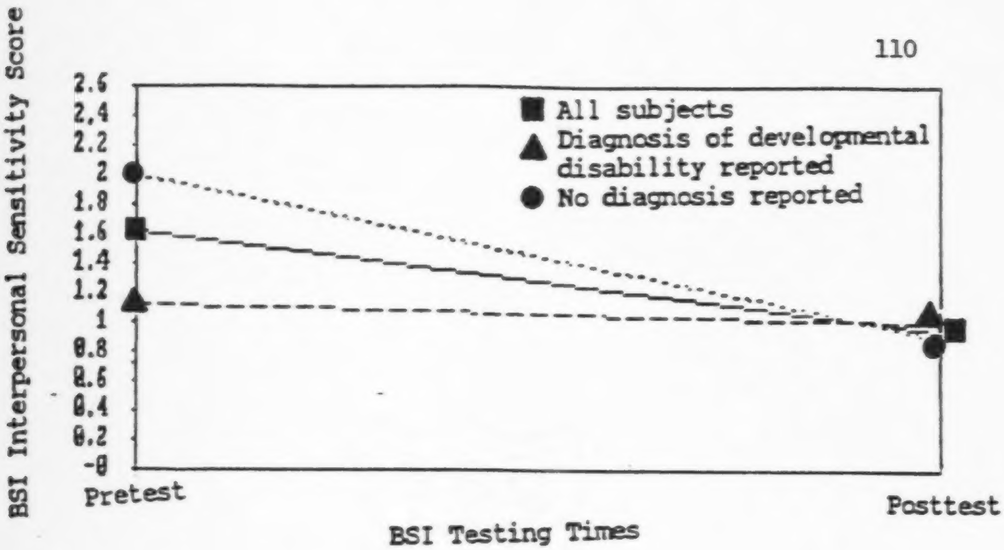


Figure 3. BSI Interpersonal Sensitivity mean pretest and posttest score comparison.

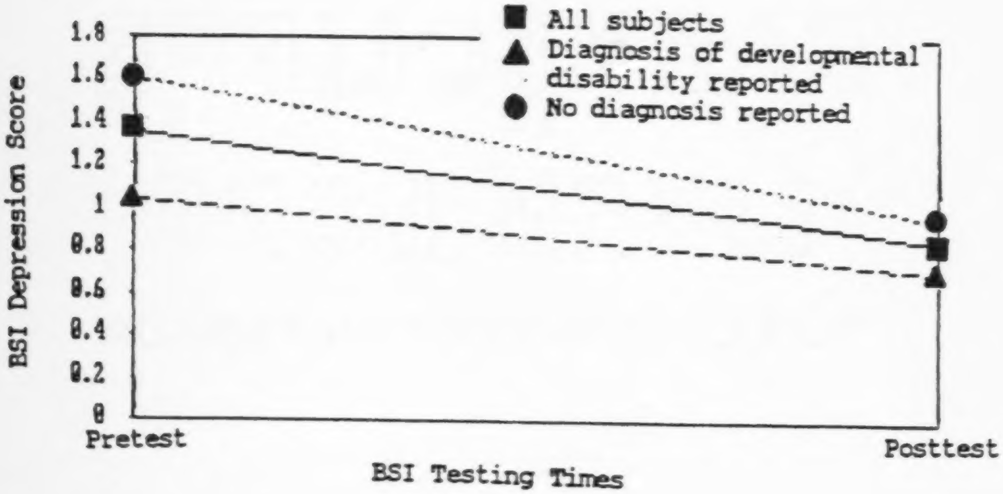


Figure 4. BSI Depression mean pretest and posttest score comparison.

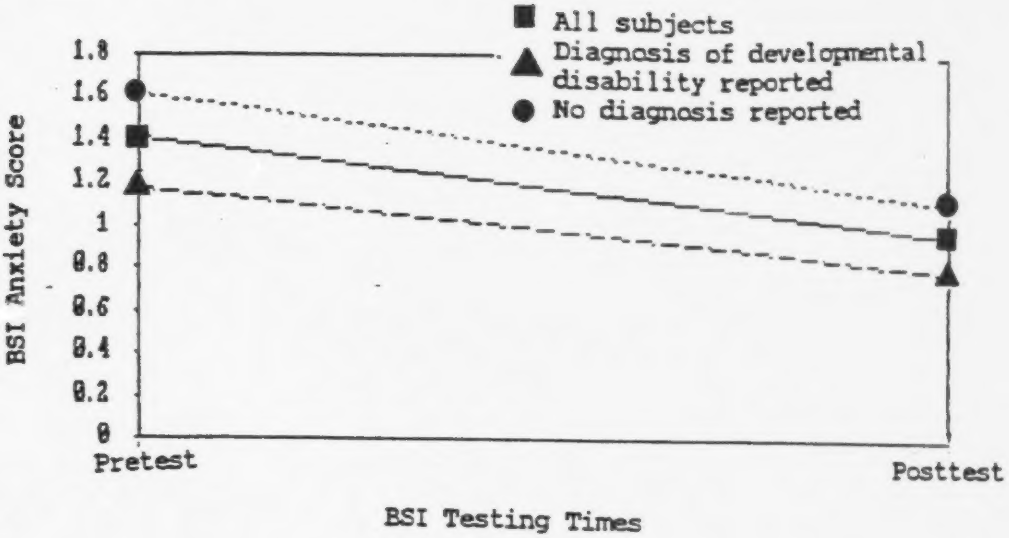


Figure 5. BSI Anxiety mean pretest and posttest score comparison.

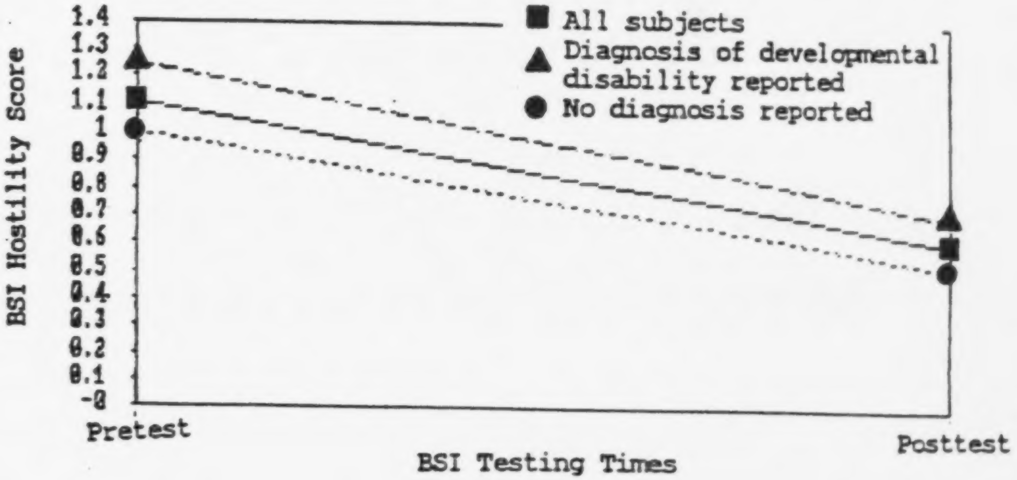
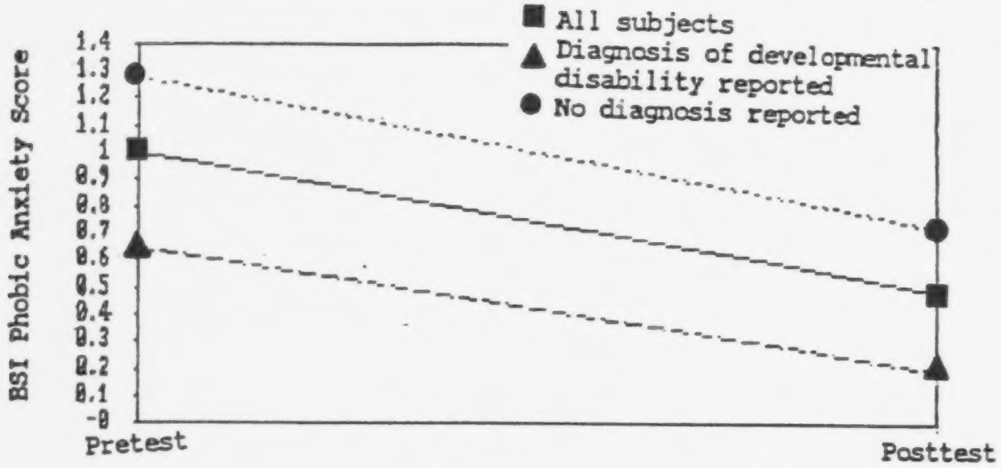
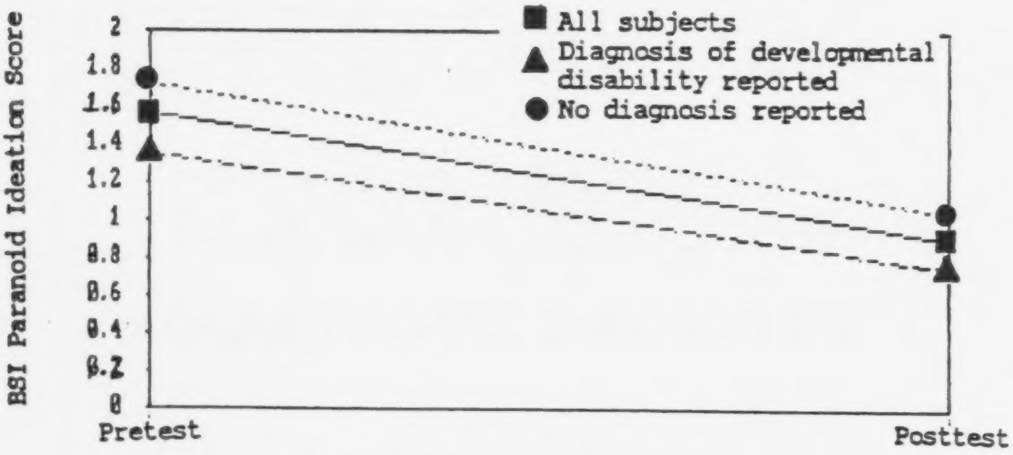


Figure 6. BSI Hostility mean pretest and posttest score comparison.



BSI Testing Times

Figure 7. BSI Phobic Anxiety mean pretest and posttest score comparison.



BSI Testing Times

Figure 8. BSI Paranoid Ideation mean pretest and posttest score comparison.

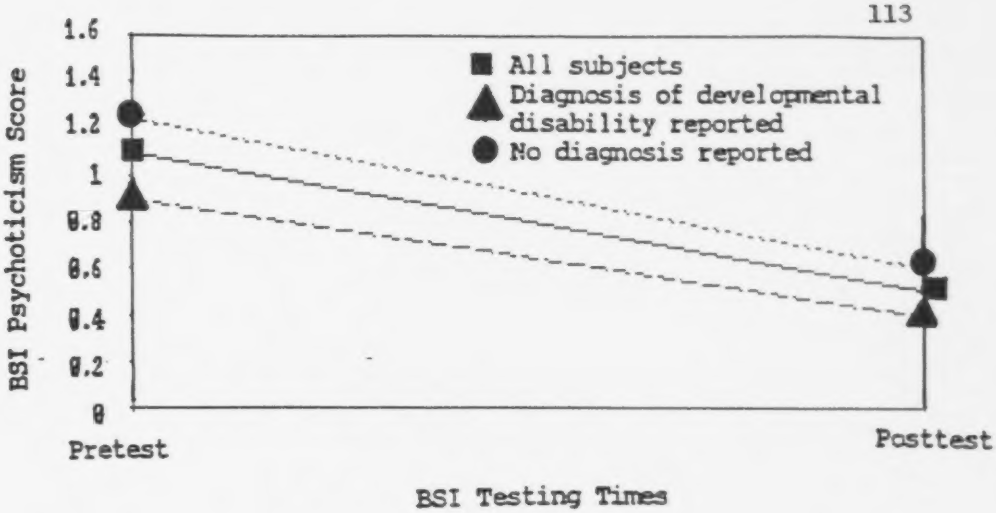


Figure 9. BSI Psychoticism mean pretest and posttest score comparison.

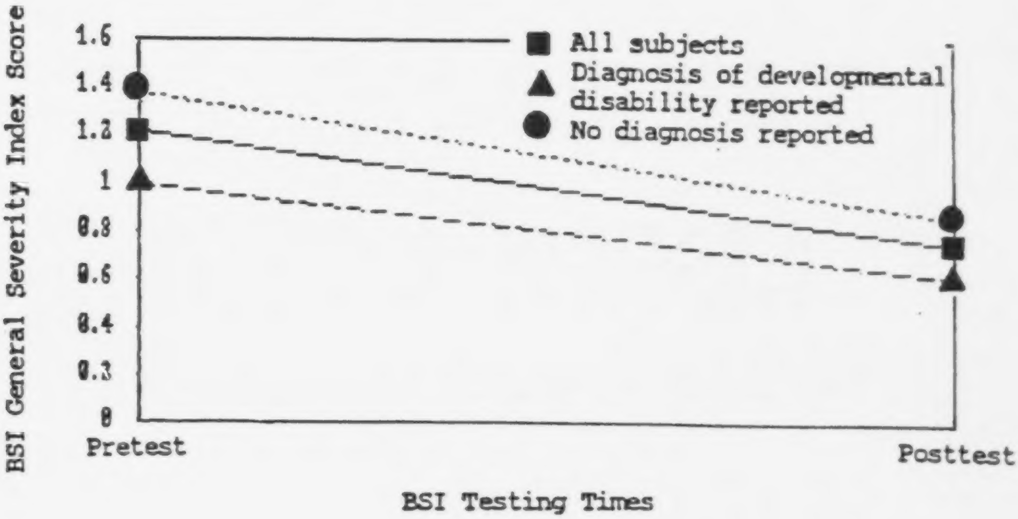


Figure 10. BSI General Severity Index mean pretest and posttest score comparison.

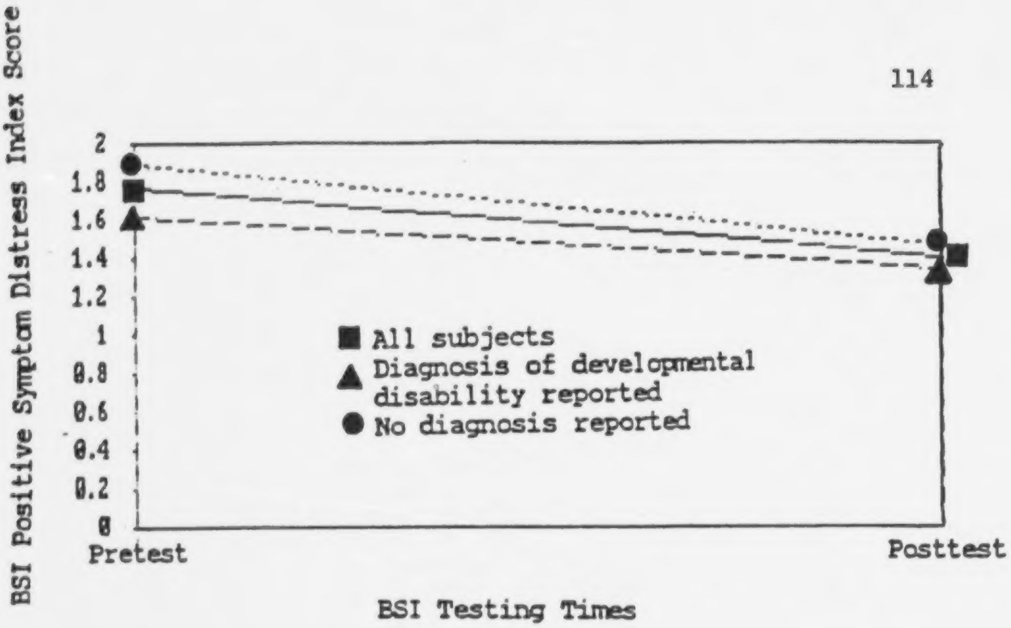


Figure 11. BSI Positive Symptom Distress Index mean pretest and posttest score comparison.

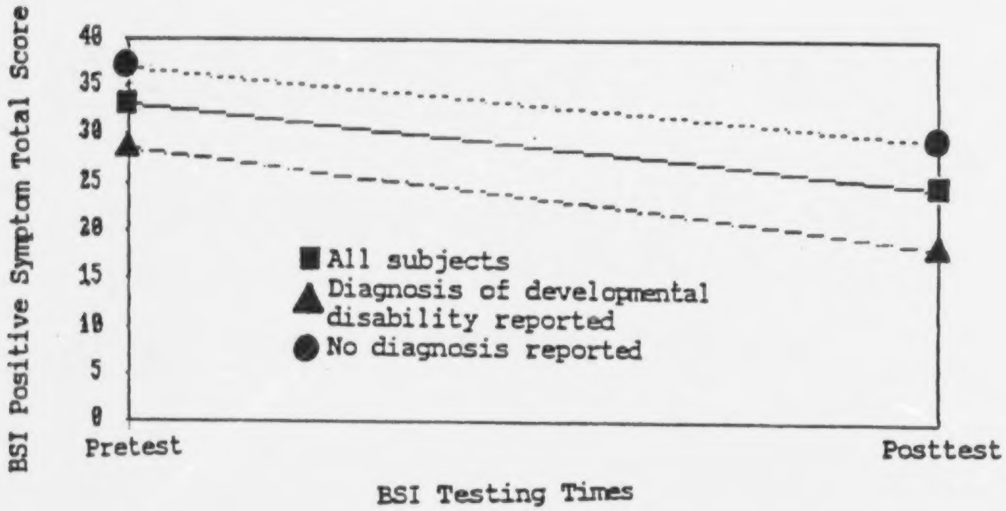


Figure 12. BSI Postive Symptom Total mean pretest and posttest score comparison.

Table 8

Two-Factor Repeated Measures Anova: Five BSI Dimension Scores

Score	Source	df	MS	F	p
Somatization	Diag (Between)	1	0.19	0.17	0.69
	Pre-Post (Within)	1	0.39	1.83	0.22
	Diag x Pre-Post	1	0.11	0.51	0.50
Obsessive-compulsive	Diag (Between)	1	2.07	2.44	0.16
	Pre-Post (Within)	1	0.49	1.79	0.22
	Diag x Pre-Post	1	0.00	0.00	0.99
Interpersonal Sensitivity	Diag (Between)	1	0.67	0.32	0.59
	Pre-Post (Within)	1	1.67	4.44	0.07
	Diag x Pre-Post	1	1.06	2.81	0.14
Depression	Diag (Between)	1	1.74	0.49	0.51
	Pre-Post (Within)	1	1.05	3.25	0.11
	Diag x Pre-Post	1	0.10	0.31	0.60
Anxiety	Diag (Between)	1	0.62	0.46	0.52
	Pre-Post (Within)	1	0.86	4.54	0.07
	Diag x Pre-Post	1	0.02	0.10	0.76

Note. Diag = Between Subjects Main Effect for subjects who did and did not report possession of a diagnosis of developmental disability. Pre-Post = Within Subjects Main Effect across pretesting and posttesting. Diag x Pre-Post = Interaction Effect.

* $p < .05$, two-tailed.

Table 9

Two-Factor Repeated Measures Anova: Four BSI Dimension Scores

Score	Source	df	MS	F	p
Hostility	Diag (Between)	1	0.21	0.13	0.73
	Pre-Post (Within)	1	1.18	6.07	0.43
	Diag x Pre-Post	1	0.01	0.03	0.87
Phobic Anxiety	Diag (Between)	1	1.47	1.17	0.32
	Pre-Post (Within)	1	1.13	5.12	0.06
	Diag x Pre-Post	1	0.01	0.06	0.81
Paranoid Ideation	Diag (Between)	1	0.48	0.36	0.57
	Pre-Post (Within)	1	1.82	6.69	0.04*
	Diag x Pre-Post	1	0.01	0.03	0.88
Psychoticism	Diag (Between)	1	0.32	0.42	0.54
	Pre-Post (Within)	1	1.44	4.36	0.08
	Diag x Pre-Post	1	0.02	0.07	0.81

Note. Diag = Between subjects Main effect for subjects who did and did not report possession of a diagnosis of developmental disability. Pre-Post = Within subjects Main Effect across pretesting and posttesting. Diag x Pre-Post = Interaction Effect.

* $p < .05$, two-tailed.

Table 10

Two-factor Repeated Measures Anova: BSI Global Scores

Score	Source	*df*	*MS*	*F*	*p*
General Severity Index	Diag (Between)	1	0.46	0.44	0.53
	Pre-Post (Within)	1	0.89	7.08	0.03*
	Diag x Pre-Post	1	0.02	0.19	0.68
Positive Symptom Total	Diag (Between)	1	418.18	1.26	0.30
	Pre-Post (Within)	1	328.71	5.57	0.05*
	Diag x Pre-Post	1	8.71	0.15	0.71
Positive Symptom Distress Index	Diag (Between)	1	0.17	0.31	0.59
	Pre-Post (Within)	1	0.56	6.20	0.04*
	Diag x Pre-Post	1	0.03	0.33	0.58

Note. Diag = Between subjects Main Effect for subjects who did and did not report possession of a diagnosis of developmental disability. Pre-Post = Within subjects Main Effect across pretesting and posttesting. Diag x Pre-Post = Interaction Effect.

* $p < .05$, two-tailed.

Table 8, Table 9 and Table 10 indicate that no significant differences were found between subjects who did and did not possess a diagnosis of developmental disability nor were there interaction effects found between groups for pretest and posttest scores.

2. Norm Comparisons

The second hypothesis referred to the BSI global and dimensional scores compared to the test norms. It stated that the obtained posttest BSI scores would be significantly lower than the Psychiatric Outpatient Norms (Derogatis, 1982) and that the observed pretest scores would not be significantly lower than the Psychiatric Outpatient Norms. This difference would be evidence that positive change had been found between the BSI pretest and posttest scores. Analysis of this hypothesis was assessed through one-tailed z-tests which compared the dimension and global scores with the norms.

Figure 1 to Figure 12 graphically describe the mean differences observed in the nine dimension scores and the three global scores of the BSI between pretesting and posttesting for all subjects. Box and whisker plots found in Appendix D, Appendix E, and Appendix F exemplify percentile differences and median differences between the pretesting and posttesting for the BSI dimension scores and global scores, respectfully.

Upon examination of both the graphs of the means of the BSI scores and the box and whisker plots, it would seem that there has indeed been positive change - which can be observed in the lowering of scores from pretesting to posttesting. Further examinations tested the significance of such appearances.

Table 11 displays BSI pretest, posttest and norm dimension and global score means and standard deviations. A comparison of pretest and posttest BSI score means for all scores with the Outpatient Norms is in line with the second hypothesis. Eight of the comparisons between posttest means and the norm means were significant while only one pretest normative difference reached significance (see Table 12).

3. Score Comparisons over time.

The third hypothesis which supported evidence of positive change stated that a significant lowering of scores between BSI pretesting and posttesting scores would be observed. Main effect results related to the passage of time ('Pre-Post') found from the two-way Anova in a repeated measures design described in Table 8, Table 9 and Table 10 were examined.

There was a significant difference between pretesting and

Table 11

BSI Pretest, Posttest and Psychiatric Outpatient Norms Means and Standard Deviations

	Pretest		Posttest		Norms	
	N = 9		*N* = 9		*N* = 1002	
Scores	*M*	*SD*	*M*	*SD*	*M*	*SD*
Somatization	0.81	0.93	0.49	0.59	0.83	0.79
Obsessive-compulsive	1.30	0.87	0.96	0.70	1.57	1.00
Interpersonal Sensitivity	1.61	1.17	0.94	0.99	1.58	1.05
Depression	1.35	1.00	0.85	0.84	1.80	1.08
Anxiety	1.41	0.72	0.96	0.96	1.70	1.00
Hostility	1.11	1.03	0.60	0.75	1.16	0.93
Phobic Anxiety	1.00	0.95	0.49	0.76	0.86	0.88
Paranoid Ideation	1.56	0.96	0.91	0.75	1.14	0.95
Psychoticism	1.09	0.87	0.51	0.49	1.19	0.87
General Severity Index	1.21	0.80	0.75	0.65	1.32	0.72
Positive Symptom Distress Index	1.77	0.63	1.40	0.42	2.14	0.61
Positive Symptom Total	33.11	12.27	24.67	15.63	30.80	11.63

Table 12

BSI Pretest and Posttest Scores Compared to Psychiatric Outpatient Norms with z-tests

Scores	Pretest Obtained z	Posttest Obtained z
Somatization	-0.08	1.28
Obsessive-compulsive	0.823	-1.823 *
Interpersonal Sensitivity	0.886	-1.817 *
Depression	-1.244	-2.639 *
Anxiety	-0.778	-2.213 *
Hostility	0.158	-1.806 *
Phobic Anxiety	0.477	1.974
Paranoid Ideation	0.317	-0.723
Psychoticism	-0.348	-2.341 *
General Severity Index	-0.475	-2.375 *
Positive Symptom Distress Index	-1.840 *	-3.163 *
Positive Symptom Total	0.598	-1.582

Note. Null Hypothesis: Sample *M* - Norm *M* = 0. Alternative Hypothesis: Sample *M* < Norm *M*. Critical Z value = -1.645.

* *p* < .05, one-tailed.

posttesting for all subjects in all three BSI global scores. The global scores consider all of the dimension scores on the BSI.

A significant difference was also found between pretesting and posttesting for the dimension score of Paranoid Ideation.

BSI Analyses Summary

The evidence contained within the z-tests and two-way Anovas performed upon the BSI test scores seems to point to the following global scores in posttesting to be significantly lower than the Outpatient Norms, and to be significantly lower in posttesting than in pretesting:

a) General Severity Index, and

b) Positive Symptom Distress Index.

Only one score: Positive Symptom Distress Index was already indicated with a z-test as being significantly lower than the norms in pretesting. The balance of the pretest scores were not indicated by z-tests as lower than the norm scores.

There was a significant difference between pretesting and posttesting for all subjects in all three BSI global scores.

There were no differences found between the diagnosed and nondiagnosed groups. No interaction effects between groups for pretesting and posttesting scores were found.

The table of means (Table 7) and the graphs of the dimension scores (Figure 1 to Figure 12, inclusive) seem to indicate that these scores declined over time. However significant results were not confirmed within the two-way Anova designs. Note that within the box and whisker graphs (see Appendix d, Appendix E, and Appendix F), many outliers and extreme scores are indicated, describing a large range of scores which may have skewed the results for the dimension scores of the BSI.

B. SAS-SR Data Analysis

As with the BSI data analysis, the number of subjects is reduced to nine because one subject left the group after attending two sessions. Other fluctuations in the number of subjects are due to different parts of the test not applying to everyone, so not all subjects completed the whole test. Also certain parts of some subjects' data are excluded due to extenuating circumstances. For example, some subjects at the time of the testing had expressed that they were undergoing extreme stress in certain life role areas and the examiner suspected that their answers to some test questions may have been severely affected by their stress situations to the point of not being able to answer the questions as thoughtfully or as accurately as would be expected, or with similar thoughtfullness as the other subjects. On one occasion, a subject refused to answer one part of the test. On another occasion another subject became upset and could not continue, having to leave the testing situation.

4. Comparisons of independent variables.

A two-way Anova with a repeated measures design was employed in order to examine the fourth hypothesis which stated that no significant mean differences nor interaction effects would be found between the SAS-SR scores of subjects who did and did not possess a diagnosis of developmental disability across pretesting and posttesting. Table 13 indicates the means and standard deviations of the two groups at pretesting and posttesting. Figures 13 to 17 (inclusive) graphically compare the means of the two groups for the SAS-SR scores.

Although there appear to be some differences between the SAS-SR scores of the two groups of subjects if one simply views the graphs of the mean scores, especially for the Work and Economic scores where the lines on the graphs seem to intersect quite drastically over time, further examination is required in order to determine the significance of the seeming differences. Table 14 indicates the results of the repeated measures design in a two-way Anova.

Table 14 indicates that no significant differences were found for either of the main effects or for the interaction effect.

Table 13

SAS-SR Means and Standard Deviations for Subjects Who Did and Did Not Report Possession of a Diagnosis of Developmental Disability

	Diagnosis						No Diagnosis					
	Pretest			Posttest			Pretest			Posttest		
Score	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*
Work	2.38	1.81	4	2.72	2.01	3	2.77	1.38	5	2.00	0.58	5
Social And Leisure	2.46	0.31	4	2.96	0.81	4	2.61	0.33	5	2.63	0.27	5
Extended Family	1.54	0.40	3	1.59	0.57	3	2.13	0.52	5	1.90	0.35	5
Economic	2.67	1.53	3	1.33	0.58	3	2.20	1.64	5	2.40	1.52	5
Overall Adjustment	2.15	0.47	4	2.28	0.23	4	2.11	0.58	5	1.99	0.45	5

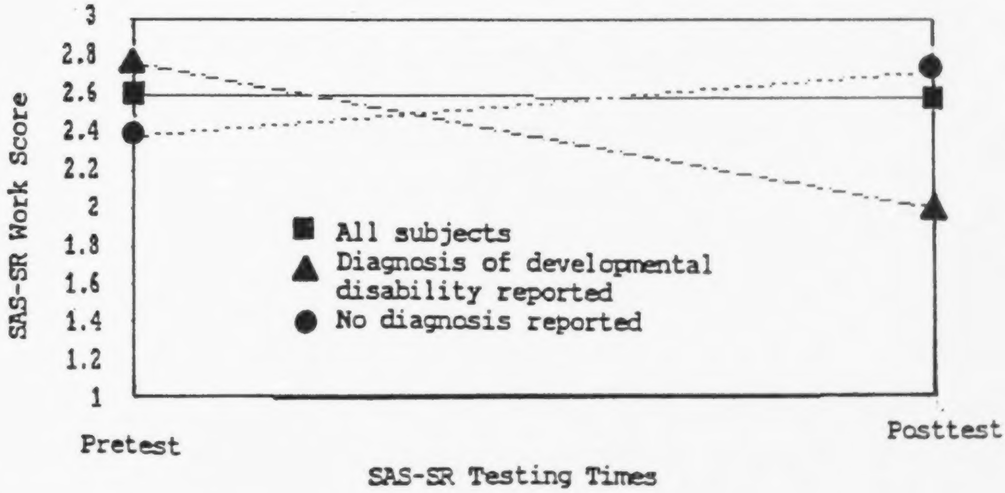


Figure 13. SAS-SR Work score pretest and posttest mean comparison.

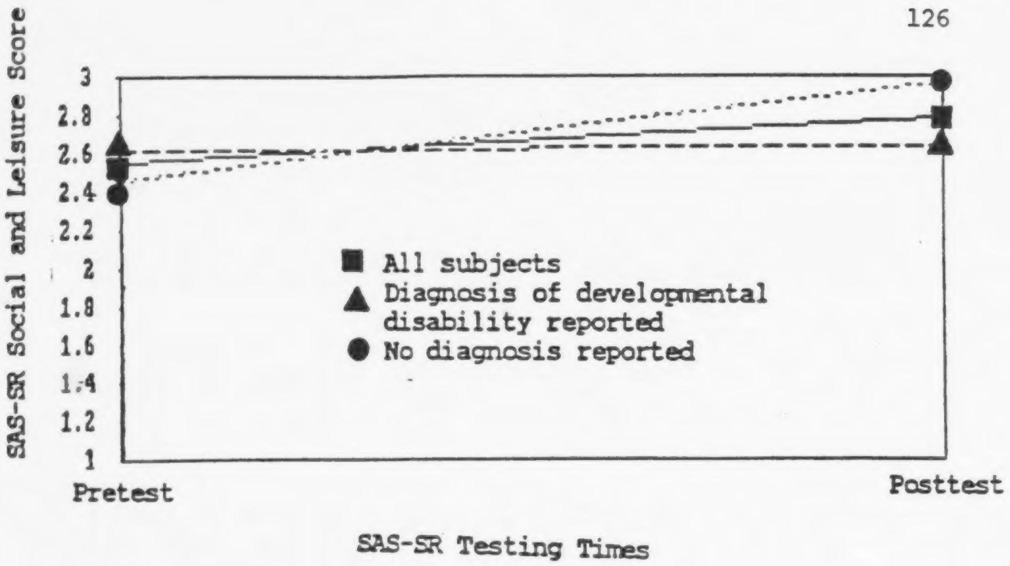


Figure 14. SAS-SR Social and Leisure score pretest and posttest mean comparison.

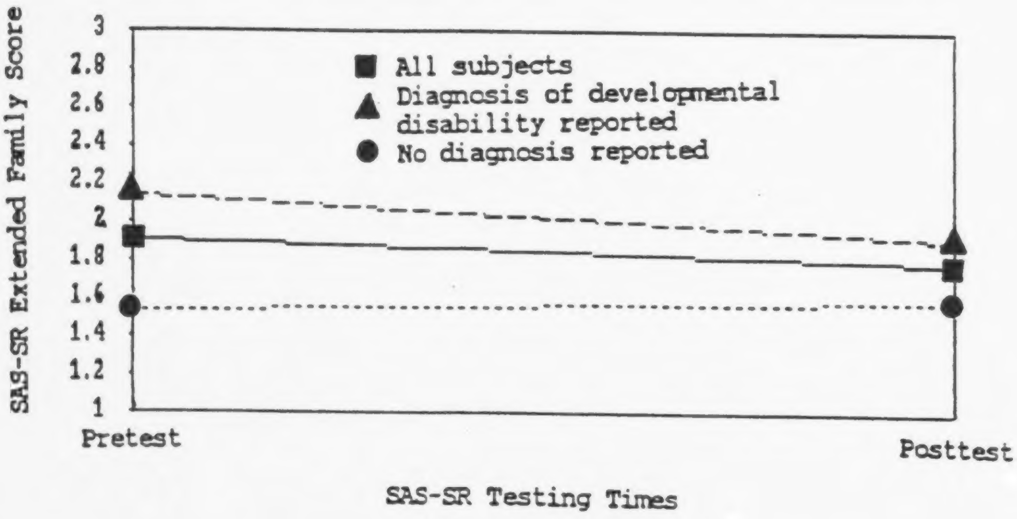


Figure 15. SAS-SR Extended Family score pretest and posttest mean comparison.

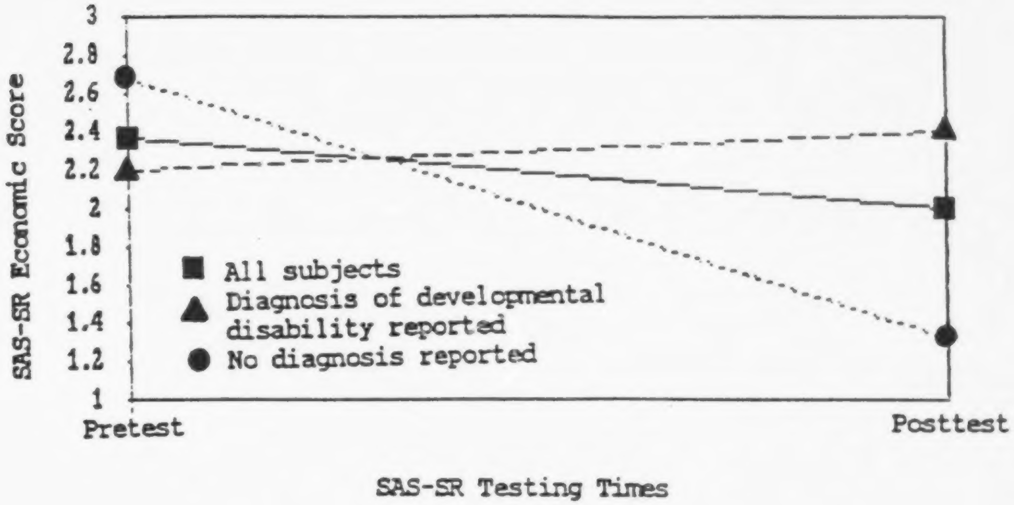


Figure 16. SAS-SR Economic score pretest and posttest mean comparison.

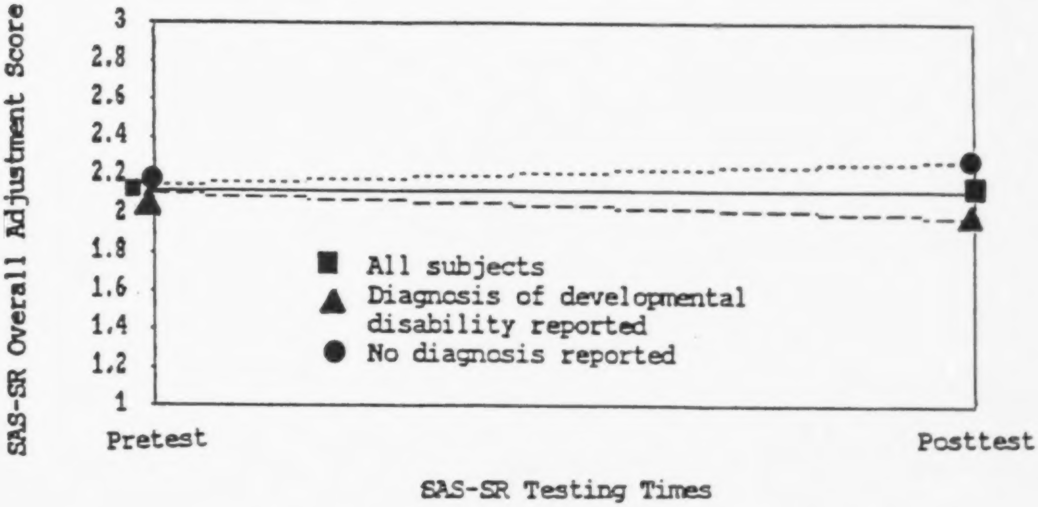


Figure 17. SAS-SR Overall Adjustment Score pretest and posttest mean comparison.

Table 14

SAS-SR: Anova For A Two-Factor Repeated Measures Design

Score	Source	df	MS	F	p
Work	Diag (Between)	1	0.51	0.14	0.72
	Pre-Post (Within)	1	0.63	1.38	0.29
	Diag x Pre-Post	1	0.47	1.02	0.35
Social And Leisure	Diag (Between)	1	0.04	0.28	0.61
	Pre-Post (Within)	1	0.29	0.95	0.36
	Diag x Pre-Post	1	0.25	0.84	0.39
Extended Family	Diag (Between)	1	0.76	3.45	0.11
	Pre-Post (Within)	1	0.03	0.15	0.71
	Diag x Pre-Post	1	0.07	0.34	0.58
Economic	Diag (Between)	1	0.34	0.09	0.78
	Pre-Post (Within)	1	1.20	2.64	0.16
	Diag x Pre-Post	1	2.20	4.84	0.07
Overall Adjustment	Diag (Between)	1	0.12	0.31	0.59
	Pre-Post (Within)	1	0.00	0.01	0.91
	Diag x Pre-Post	1	0.07	1.99	0.20

Note. Diag = Between subjects Main Effect for subjects who did and did not report possession of a diagnosis of developmental disability. Pre-Post = Within subjects Main Effect across pretesting and posttesting. Diag x Pre-Post = Interaction Effect.

* $p < .05$, two-tailed.

These findings suggest that there were no significant differences between subjects who did and did not possess a diagnosis of developmental disability, nor any significant differences between pretesting and posttesting.

5. Norm Comparisons

In order to examine the hypothesis which stated that the posttest obtained scores would not be found to be significantly higher than the Community Sample Norms of the SAS-SR (Weissman et al., 1978) and that the pretest scores would be found to be significantly higher than the Community Sample Norms one-tailed z-tests were performed on the role scores and the Overall Adjustment scores.

Table 15, displays the SAS-SR pretest, posttest and norm role scores and Overall Adjustment score means and standard deviations. Figures 13 to 17 display visually the changes in the mean scores from pretesting to posttesting. Box and whisker plots shown in Appendix G exemplify percentile differences and median differences between pretest and post test scores of the SAS-SR.

Although the table and the graphs of the means as well as the box and whisker plots may seem to indicate disparate evidence of change, and even display evidence that the scores may not have changed at all (the Overall Adjustment score seems to have

Table 15

SAS-SR Pretest, Posttest Scores and Community Sample Norms Means and Standard Deviations

Scores	Pretest			Post Test			Norms		
	M	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*	*N*
Work	2.59	1.49	9	2.58	1.46	9	1.40	0.46	399
Social and Leisure	2.55	0.31	9	2.78	0.56	9	1.83	0.52	482
Extended Family	1.91	0.54	8	1.78	0.43	8	1.34	0.33	475
Economic	2.37	1.51	8	2.00	1.31	8	--	--	--
Overall Adjustment	2.12	0.50	9	2.12	0.38	9	1.59	0.33	482

Note. Community Sample Norms are not available for the SAS-SR Economic score.

remained essentially the same from pretesting to posttesting), further examination of change is required. Table 16 presents the results of the z-test comparisons.

The z-tests performed upon the pretest and posttest scores indicated that all SAS-SR scores were higher than the Community Sample Norms, providing significant evidence that no change occurred between pretesting and posttesting.

Table 16

SAS-SR Pretest and Posttest Scores Compared to Community Sample Norms with z-tests

Scores	Pretest Obtained z	Posttest Obtained z
Work	8.563 *	5.438 *
Social And Leisure	4.235 *	5.588 *
Extended Family	5.182 *	3.667 *
Overall Adjustment	6.000 *	6.000 *

Note. Null Hypothesis: Sample *M* - Norm *M* = 0. Alternative Hypothesis: Sample *M* > Norm *M*. Critical z = 1.645.

* *p* < .05, one-tailed.

6. Scores Comparisons over time.

The main effect of time (labelled 'Pre-Post') for the repeated measures two-way Anova in Table 15 is examined for significant evidence of change in SAS-SR scores between pretesting and posttesting in order to test the sixth hypothesis. Figure 13 to Figure 17 graphically describe the mean differences observed in the SAS-SR role area scores and in the Overall Adjustment Score. Box and whisker plots shown in Appendix G exemplify percentile differences and median differences between pretest and posttest scores of the SAS-SR.

No significant differences were found between pretesting and posttesting of the SAS-SR within this analysis.

SAS-SR Analysis Summary

The above evidence contained within the z-tests seems to point to the fact that the changes were not significant between pre and post testing of the SAS-SR. Both pretest and posttest score means as compared to the norms with z-tests indicated that all test scores seemed to be higher than the community sample norms. No comparisons of SAS-SR scores over time (from pretesting to posttesting) were found to have significant differences in the repeated measures two-way Anova. No significant differences were found between the diagnosed and non-diagnosed groups. No interaction effects were found between groups across pretesting and posttesting.

C. Target Goals Data Analysis

Each group member had been asked to define one to three goals that they wished to work on during the group therapy. Everyone defined at least one goal. Some gave two goals, and a few defined three. Everyone had included at least one interpersonal goal. These goals were to be rated on discomfort, expectations for improvement during therapy, achievement half way through the group sessions, and at the end of the therapy on a Likert Scale. Group members were encouraged to add goals during the mid-point of therapy. Two group members added goals during this time.

Because each group member defined at least one interpersonal goal before therapy began, and rated it regarding achievement at the mid-point of the therapy sessions, and again at the conclusion of therapy, this was the goal selected for analysis. In the case of two interpersonal goals having been given by subjects, the first goal was selected for analysis. This occurred because for the two people who did give two interpersoanl goals, each goal was determined by the author to essentially be the same goal. For example: Goal 1) learning to trust others, and Goal 2) not being afraid to trust others. The other goal types were defined as: self-knowledge, anger management, social development, physical, and vocational achievement.

Interpersonal goals were defined as those which involved learning new, more satisfying ways of interacting with others. Self-knowledge goals were defined as such if they suggested a looking at any of one's motivations, past, relationships or feelings in order to achieve a better understanding of one's self. Goals said to be covered by the name 'anger management' had to do with understanding and learning new behaviors to replace present behaviors used to deal with anger. The present methods of dealing with angry feelings may have been unsatisfying. Social development goals had to do with learning behaviors which would enhance one's social affinity and acceptance in the community. Physical goals were defined as those goals which had to do with care of the physical body. Vocation achievement goals involved study or improvement of one's satisfaction with a job.

Table 17 outlines the types of goals given by each group member.

Table 18 describes the Target Goals score means and standard deviations for the Discomfort, Expectations, and the two Achievement ratings for the interpersonal goals defined by the group members. The Discomfort and Expectations For Improvement ratings were completed before therapy began.

7. Comparisons of independent variables.

In order to examine Hypothesis 7 regarding the finding of no differences in the Target Goal scores between subjects who did and did not possess a diagnosis of developmental disability across the mid-point achievement rating and the end point achievement rating of the interpersonal goals, a two-way Anova with a repeated measures design was performed.

Table 19 indicates the means and standard deviations of the two groups at the two testing times. Figure 18 describes the mean

Table 17

Target Goal Types Given by Group Members Who Did and Did Not Report Possession of a Diagnosis of Developmental Disability

Group Member #	Diagnosis Reported	# Of Goals	Goal Type
Goals Defined by Group Members Before Beginning Therapy			
2	No	2	2 Interpersonal
3	Yes	2	2 Interpersonal
4	No	3	1 Interpersonal 2 Self-Knowledge
5	No	2	1 Interpersonal 1 Anger Management
6	Yes	1	1 Interpersonal
7	No	1	1 Interpersonal
8	Yes	1	1 Interpersonal
9	Yes	1	1 Interpersonal
10	No	3	1 Interpersonal 2 Vocational Achievement
Goals Defined by Group Members at Mid-point of Therapy			
3	Yes	1	1 Social Development
4	No	2	1 Physical 1 Anger Management

Table 18

Interpersonal Target Goal Ratings

Rating	M	SD
Discomfort	4.33	1.12
Expectations	3.89	1.05
Achievement At Mid-point	4.11	0.78
Achievement At End-point	4.67	1.00

Table 19

Target Goals Means and Standard Deviations for Subjects Who Did and Did Not Report Possession of a Diagnosis of Developmental Disability

	Diagnosis (n = 4)						No Diagnosis (n = 5)					
Score	Before Group		Mid-Point		End-point		Before Group		Mid-point		End-point	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Discomfort	3.25	1.26					3.20	1.30				
Expectations	3.50	1.29					2.40	0.89				
Achievement			4.25	0.96	4.75	1.50			3.20	0.84	4.20	0.84

scores of the two groups. Although this graph of the means seems to visually indicate that there may be some difference in the scores of the two groups of subjects, further examination of the data is required. Table 20 indicates the findings of the repeated measures design in a two-way Anova.

Table 20 indicates that no significant differences were found for the main effect which delineated whether or not subjects reported possession of a diagnosis of developmental disability ('Diag'), or for the interaction effects between possession or not of a diagnosis of developmental disability and across pretesting and posttesting for all comparisons.

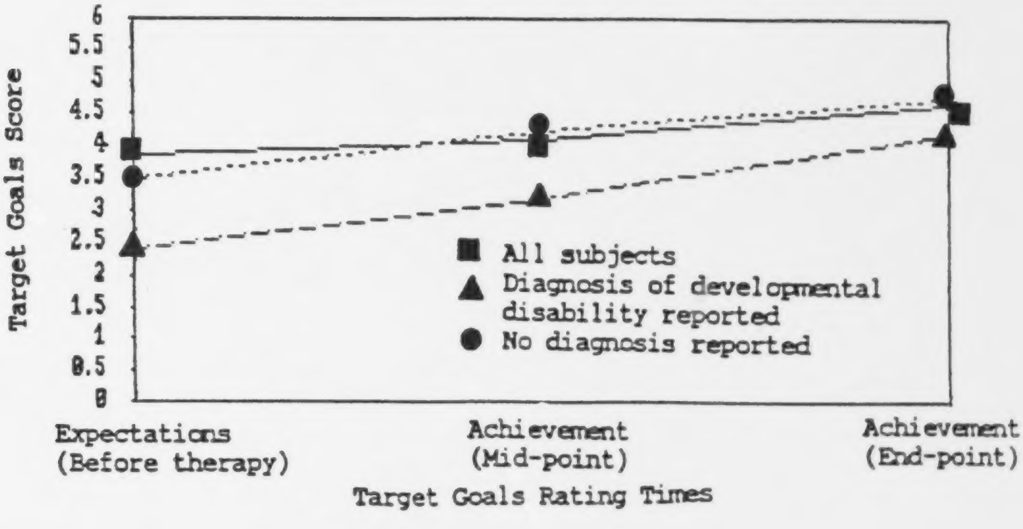


Figure 18. Target Goals mean score comparisons: Expectations, Achievement at mid-point and Achievement at end-point of therapy.

Table 20

Target Goals: Anova For A Two-Factor Repeated Measures Design

Source	df	MS	F	p
A. Pretest = Achievement Mid-point, Posttest = Achievement End-point				
Diag (Between)	1	0.18	0.12	0.74
Pre-Post (Within)	1	1.34	4.48	0.72
Diag x Pre-Post	1	0.01	0.04	0.85
B. Pretest = Expectations, Posttest = Achievement Mid-point				
Diag (Between)	1	5.14	4.51	0.07
Pre-Post (Within)	1	2.67	3.24	0.12
Diag x Pre-Post	1	0.00	0.00	0.96
C. Pretest = Expectations, Posttest = Achievement End Point				
Diag (Between)	1	3.03	1.41	0.27
Pre-Post (Within)	1	10.34	26.07	0.001*
Diag x Pre-Post	1	0.34	0.85	0.39

Note. Diag = Between subjects Main Effect for subjects who did and did not report possession of a diagnosis of developmental disability. Pre-Post = Within subjects Main Effect across pretesting and posttesting (pretests and posttests are indicated by 'A.', 'B.' and 'C.'). Diag x Pre-Post = Interaction Effect.

* $p < .05$, two-tailed.

8. Comparison of Achievement Scores at the Mid-point and End-point of Therapy

The eighth hypothesis stated that the Achievement End-point self rating scores would be observed to be higher than the Achievement Mid-point ratings of the subjects interpersonal goals. Figure 18 graphically describes the mean differences in the two scores and the box and whisker plot in Figure 19 visually indicates the percentile and median differences. Although these two graphical representations may seem to point to the indication of some change, further examination of the data is required before significance can be claimed. Table 18 also shows that there may be a difference between the mean of the mid-point Achievement score (4.11) and the mean end-point Achievement score (4.67).

The main effect of time ('Pre-Post') in the two-way Anova design in Table 20 for the Achievement at mid-point and at the end of therapy is examined in order to test for change over time. The Anova comparison of the two Achievement scores indicated in Table 20 shows that no significant differences were found.

9. Comparison of Expectation Scores with Achievement Scores at the Mid-point of Therapy

In order to examine the hypothesis which stated that the Achievement scores rated at the mid-point of therapy would be found to be higher than the Expectations scores given before

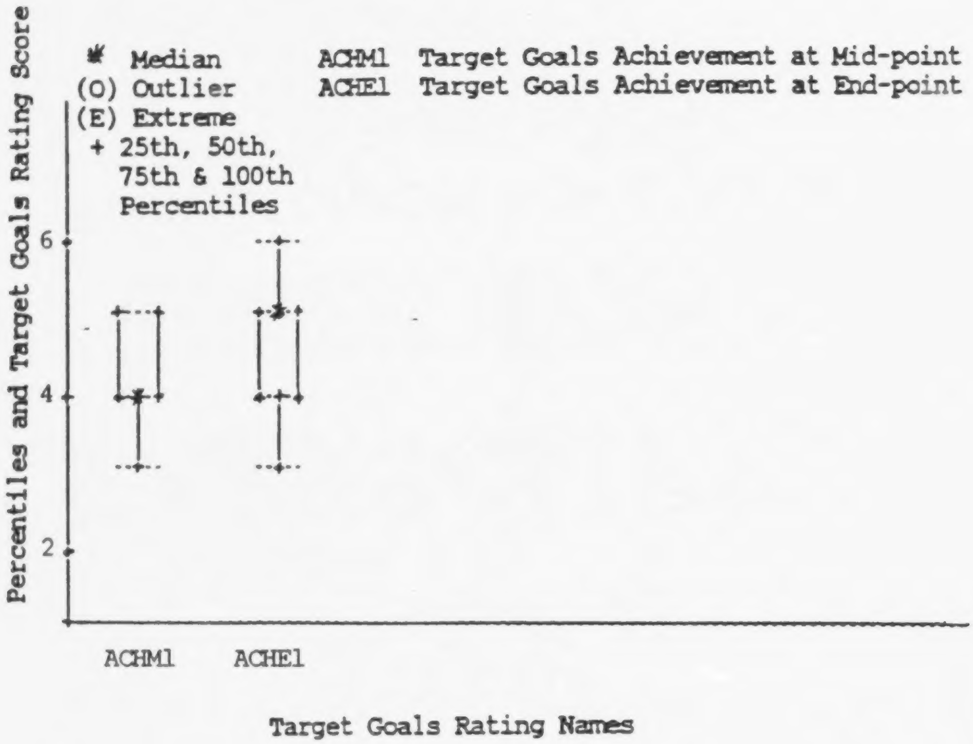


Figure 19. Percentile and median differences in a box and whisker plot for the Target Goals Achievement rating scores.

therapy began, a comparison between the two scores in the repeated measures two-way Anova in Table 22 is also examined. Figure 18 graphically describes the mean differences between the two scores. Table 18 shows that there may be differences between the mean mid-point Achievement score (4.11) and the mean Expectations score (3.89). The Anova comparison of the two scores in Table 20 did not indicate significant differences for the main effect delineating time ('Pre-Post').

10. Comparison of Expectation Scores with Achievement Scores at the End of Therapy

The tenth hypothesis stated that the Achievement End-point scores would be found to be higher than the Expectations scores. In order to examine this hypothesis the main effect delineating the passage of time in the Anova comparison in the two-way repeated measures design (Table 20) is examined between the Expectations scores and the Achievement scores at the end of therapy. A graphical representation of the mean differences in the two scores is shown in Figure 18. Table 18 shows that some difference between the mean Expectations score (3.89) and the mean Achievement end-point score (4.67) may exist. A significant difference in the Expectations mean scores and the Achievement mean scores at the end-point of therapy was found for the main effect delineating the passage of time in the Anova design in Table 20, suggesting that the rating the group members gave for their achievement of their interpersonal goals after therapy may have exceeded their expectations.

Target Goals Summary

No significant differences were found attributed to whether or not group members reported possession of a diagnosis of developmental disability, nor were interaction effects found between group membership and across pretesting and posttesting. Significant differences were found between the subjects' Expectations scores and their final Achievement ratings of their interpersonal goals.

Interrater Reliability of Process Instrumentations

The procedure for training outside observers and acquiring data for the establishment of inter-rater reliability indices for those observers for the GCQ and the HIM-G have been outlined in the 'Method' section under the title 'Process measure evaluations of observer raters'. Inter-rater reliability was constantly monitored for all raters of all rated groups.

Table 21 presents the inter-rater reliability indices for the ratings of the GCQ.

Table 21

GCQ Inter-rater Reliability Estimates

Group Sessions	Inter-rater Reliability Estimates							
	Group Members n = 6		Group Leaders n = 2			Outside Observers n = 2		
	T%	T% Within 1 Rating	T%	T% Within 1 Rating	r	T%	T% Within 1 Rating	r
Communication Group	--	--	--	--	--	0.33	0.75	0.69
Group 1	0.42	0.66	0.17	0.67	0.72	0.33	0.66	0.73
Group 5	--	--	0.33	0.58	0.66	0.17	0.92	0.82
Group 9	0.44	0.76	0.42	0.92	0.88	0.25	0.75	0.81
Group 13	0.44	0.75	0.17	0.92	0.80	0.33	0.75	0.70
Group 17	0.51	0.90	0.25	0.75	0.70	0.25	0.83	0.72

Note. Only Outside Observers evaluated the Communication Group.

T% = Total Percent Agreement.

T% Within 1 Rating = Total Percent Agreement where one rating above and one rating below the first rater's (or majority of the same ratings, in the case of the group member raters) is accepted as an agreement.

Percentage Of Agreement (T%) as a reliability index was used for all raters of all rated group sessions. Equation 1 presents the formula for calculating T%. To allow for comparisons between all of the reliability indices the same T% formula was used for GCQ evaluations from the six group member raters, the therapist and the observer raters (of whom there were two of each). Product-Moment correlation coefficients (r) were calculated for leaders' and observer raters' ratings of the GCQ.

Data sets of GCQ ratings from only six group members were utilized because further analyses necessitated at least four sets of data from each group member rater. Four data sets (from four groups) were only available from six member raters due to absences from group sessions.

$$T\% = \frac{\sum_{j} \frac{a}{b}}{c} \times 100 \tag{1}$$

Note. a = total # rating agreements (for the GCQ-S there is a possibility of 1 to 6 rating agreements). b = total # of types of ratings (for the GCQ, b = 6), c = total # of events rated (for the GCQ, c = 12). j = rating questions (for the GCQ, j = 1...12).

Reliability estimates were completed for each of the five therapeutic groups rated using the HIM-G. The reliability estimate indices were Percent Agreement (T%) and Product-Moment correlation coefficients. Equation 1 indicates the calculations used for T%. Table 22 displays each type of reliability estimate indicē for each of the five therapeutic group sessions and the classroom communications group which were evaluated with the HIM-G.

For the HIM-G there is a possiblity of one to seven rating agreements. The total number of events rated for the HIM-G is seventy-two.

It may have been possible to use a simpler calculation for T% with the HIM-G which would yield nearly the same results. However, the same equation for calculation as was used with the GCQ in order to better enable future comparisons of the resulting reliability estimates.

Table 22

HIM-G Inter-rater Reliability Estimates

Group Sessions	Reliability Estimates		
	T%	T% Within 1 Rating	r
Communication Group	0.76	0.92	0.90
Group 1	0.36	0.74	0.68
Group 5	0.42	0.74	0.70
Group 9	0.79	0.97	0.95
Group 13	0.79	1.00	0.97
Group 17	0.42	0.79	0.71

Note. T% = Total Percent Agreement.

T% Within 1 Rating = Total Percent Agreement where one rating above and one rating below the first rater's rating is accepted as an agreement.

Process Results

GCQ Data Analysis

The GCQ data analysis is composed of Hypotheses 11 and 12. The former hypothesis deals with evaluating whether or not significant changes over time were observed for the Engaged, Conflict and Avoiding scores of the GCQ. Hypothesis twelve evaluates whether or not significant linear, quadratic or cubic trends are found within the ratings of different groupings of evaluators for the three scores.

11. Mean Rating Scores Comparisons Over Time

A repeated measures design was used to test for change over five evenly spaced observation times. Nine group members, two group leaders and two outside observers rated each of the five groups with the exception of the fifth group. The group members did not rate the fifth group. Hypothesis 11 stated that significant differences would be found for the three GCQ scores for seven different groupings of raters.

Appendix H, Appendix I and Appendix J display the individual ratings given by group leaders, outside raters, group members who reported possessing a diagnosis of developmental disability and group members who reported not possessing a diagnosis of developmental disability for the GCQ scores of Engaged, Conflict and Avoiding.

Table 23 and Table 24 describe the means and standard deviations for the raw score ratings of the GCQ regarding all raters together, and separately for: therapists, observers, group members who reported possessing a diagnosis of developmental disability, and group members who reported not possessing a diagnosis of developmental disability. The therapists and observers rated five group sessions, (sessions 1, 5, 9, 13 and 17). The group members rated four group sessions, (sessions 1, 9, 13 and 17). However some group members ratings are discounted because a few members did not rate all of the four groups sessions outlined above due to absences. Four ratings are necessary in order to complete the repeated measures one-way Anova which follows.

Figure 20 to Figure 24 (inclusive) graphically describe the observed mean differences (in raw scores) between the group sessions rated with the GCQ for the following groupings of raters: all raters together, therapists and observers together, group members who did not report possessing a diagnosis of developmental disability, group members who did report possessing such a disability, and all group members together.

Box and whisker plots indicate the median differences in the raw GCQ scores over the five sessions rated by therapists and outside observers, and over the four sessions rated by group members (see Figure 25 to Figure 27, inclusive).

Table 23

GCQ Rating Means and Standard Deviations: All Raters Together and Therapists/Outside Observers

Session	*M*			*SD*		
Number	Engaged	Conflict	Avoiding	Engaged	Conflict	Avoiding
			All Raters (n = 10)			
1	3.70	2.02	2.90	1.02	1.28	1.31
5	--	--	--	--	--	--
9	4.24	1.62	2.73	0.43	1.34	1.25
13	4.54	1.67	2.67	1.00	0.64	1.32
17	4.74	0.97	1.87	0.86	0.59	1.00
			Therapists And Observers (n = 4)			
1	3.20	1.75	2.17	0.71	0.53	0.23
5	3.15	1.53	2.75	0.41	0.78	0.83
9	4.35	0.88	2.25	0.30	0.60	0.96
13	4.10	1.75	2.33	0.78	0.41	0.27
17	4.10	1.00	2.33	0.53	0.29	0.38

Note. 'All Raters' = All group members (n = 6), therapists and outside observers (n = 4). Group members did not complete the GCQ for session 5, therefore there are no entries for session 5 under 'All Raters'.

Table 24

GCQ Rating Means And Standard Deviations: Group Members

Session	*M*			*SD*		
Number	Engaged	Conflict	Avoiding	Engaged	Conflict	Avoiding
Group Members Reporting No Possession Of A Diagnosis Of Developmental Disability (n = 3)						
1	3.67	2.42	3.33	1.30	1.50	1.20
9	3.93	1.92	3.00	0.46	0.38	1.46
13	4.73	2.08	1.88	0.81	0.14	0.96
17	5.00	0.75	1.56	1.00	0.25	1.26
Group Members Reporting Possession Of A Diagnosis Of Developmental Disability (n = 3)						
1	4.42	2.00	2.89	1.18	2.38	1.92
9	4.40	2.33	3.11	0.53	2.32	1.65
13	4.93	1.17	3.89	1.51	0.95	1.84
17	5.33	1.17	1.56	0.70	1.13	1.39
All Group Members (n = 6)						
1	4.04	2.21	3.11	1.19	1.62	1.45
9	4.17	2.12	3.05	0.51	1.51	1.39
13	4.83	1.62	2.89	1.09	0.79	1.71
17	5.17	0.96	1.56	0.79	0.77	1.19

Note. Group members did not complete the GCQ for session 5.

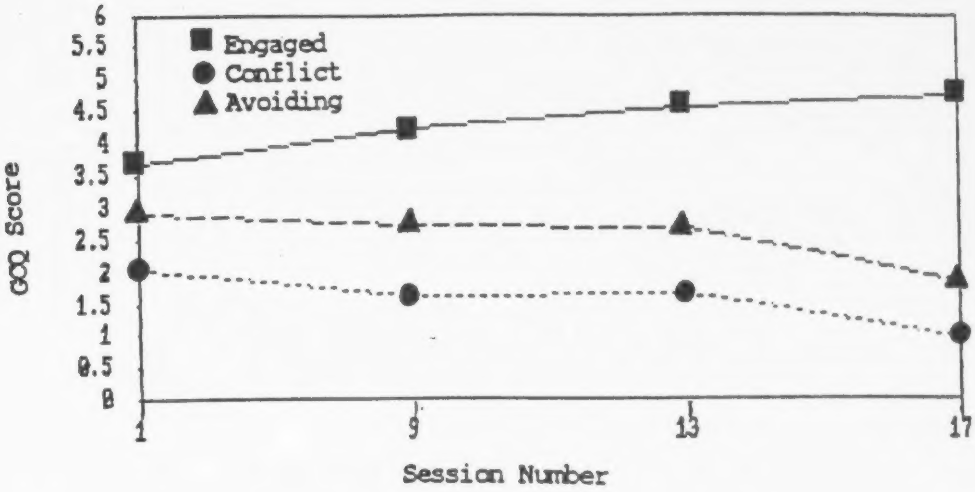


Figure 20. GCQ scores mean comparisons over four rated group sessions: all raters (n = 10).

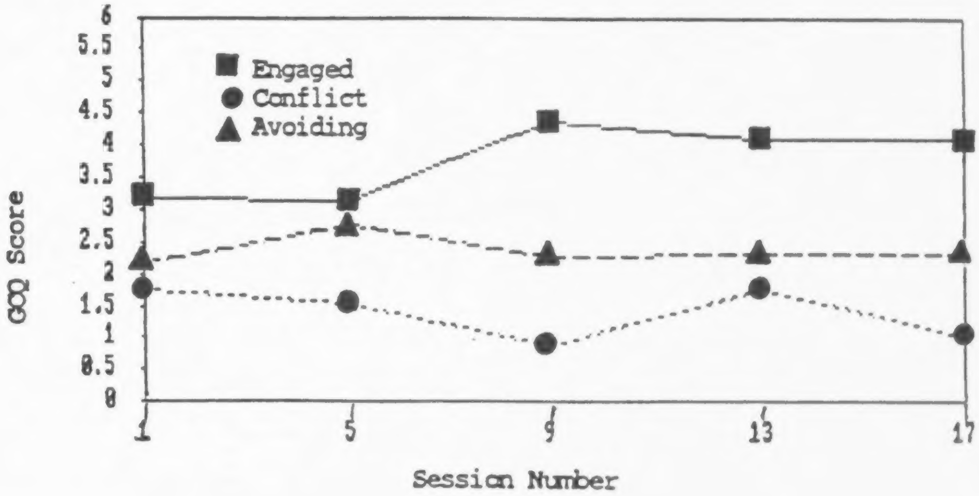


Figure 21. GCQ scores mean comparisons over five rated group sessions: therapists and observers (n = 4).

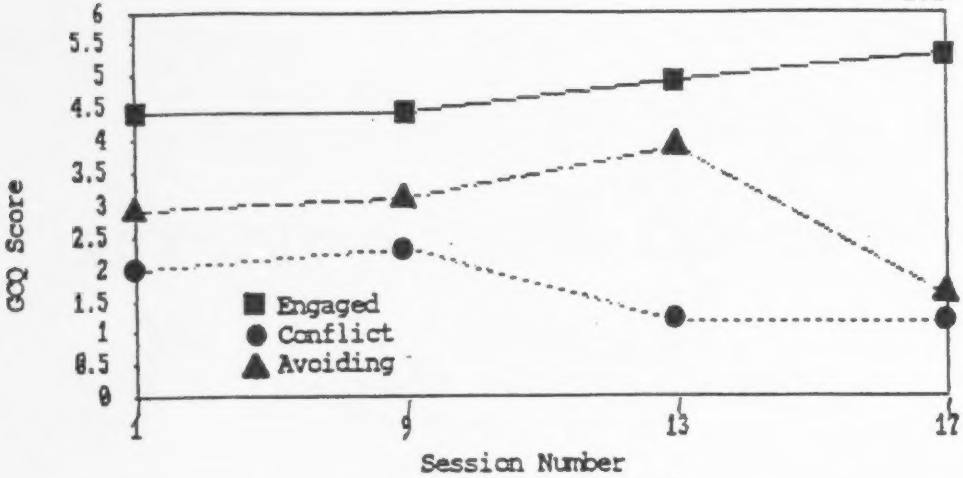


Figure 22. GCQ scores mean comparisons over four rated group sessions: group members who reported possession of a diagnosis of developmental disability (n = 3).

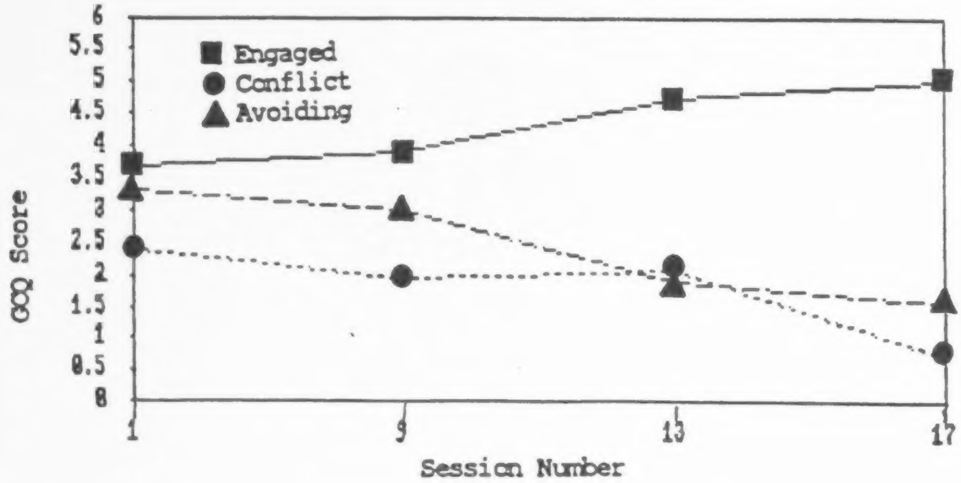


Figure 23. GCQ scores mean comparisons over four rated group sessions: group members who did not report possession of a diagnosis of developmental disability (n = 3).

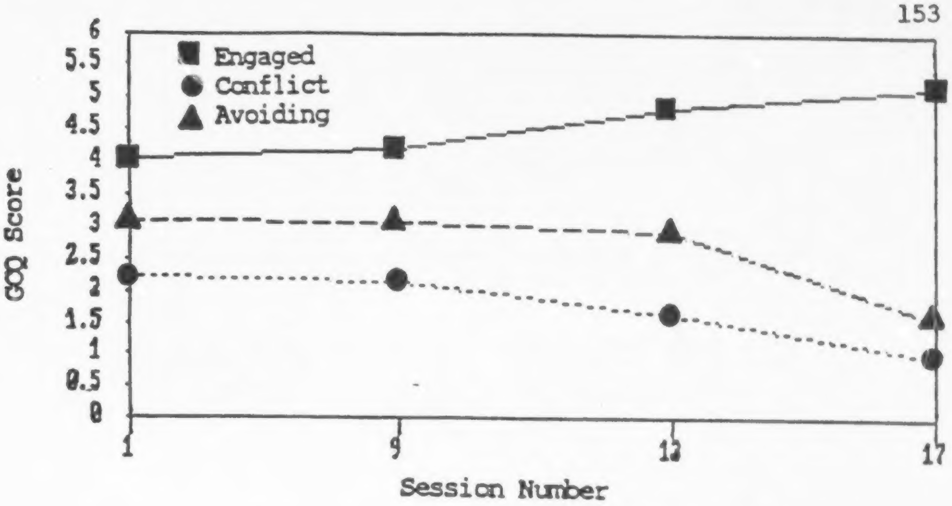


Figure 24. GCQ scores mean comparisons over four rated group sessions: all group members (n = 6).

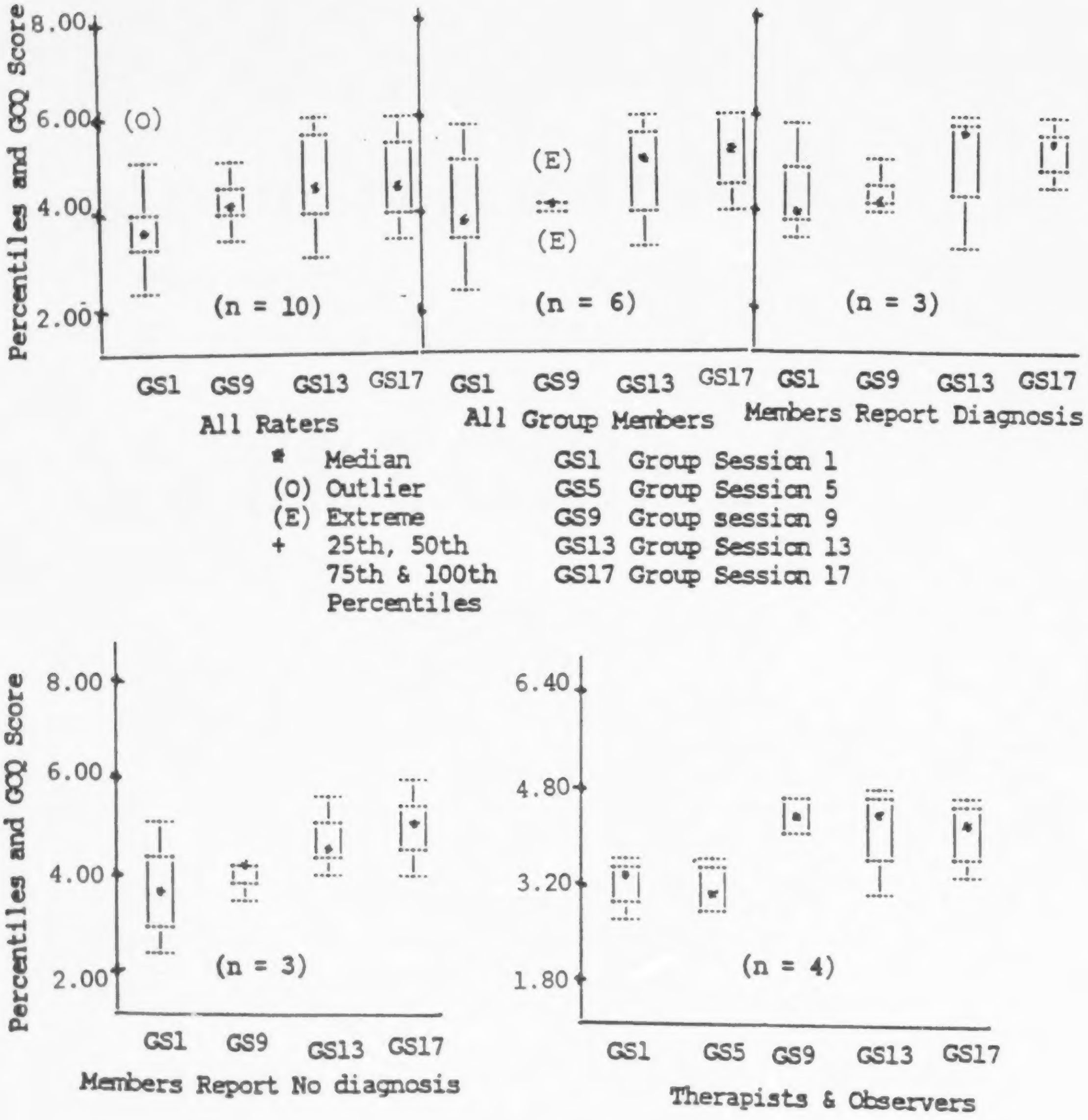


Figure 25. Percentile and median differences in box and whisker plots for the GCQ Engaged score for different rater groupings over time.

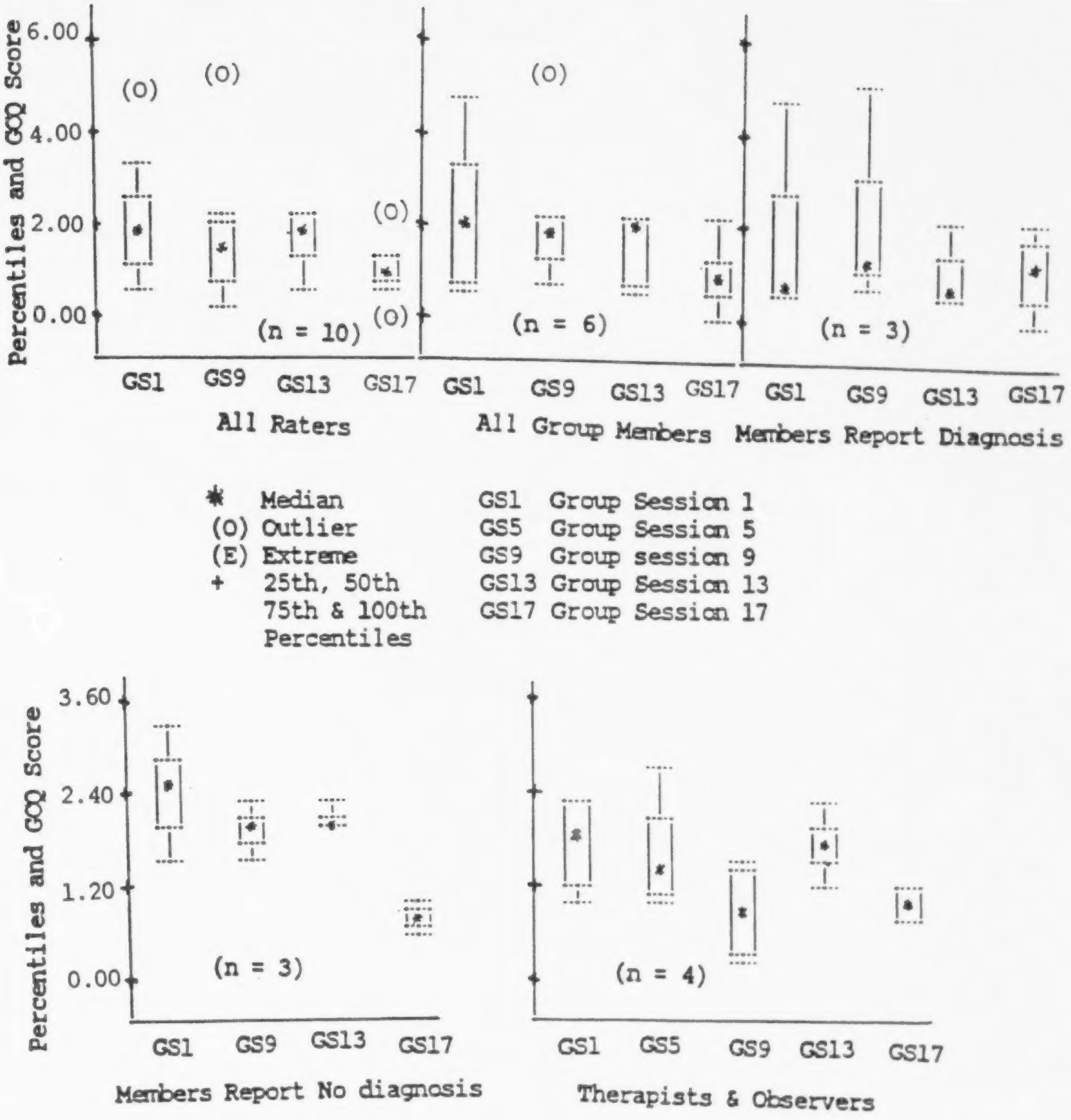


Figure 26. Percentile and median differences in box and whisker plots for the GCQ Conflict score for different rater groupings over time.

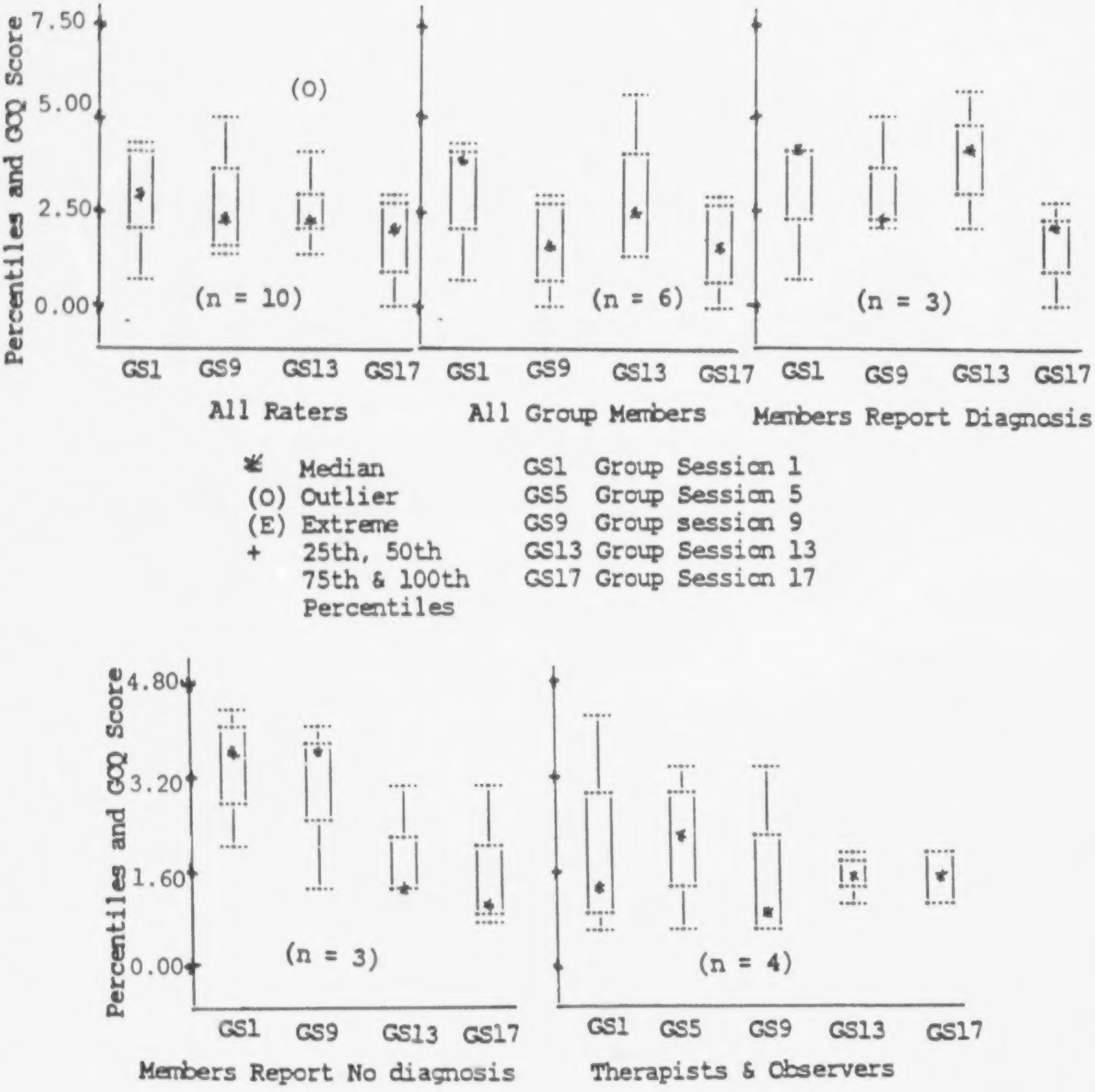


Figure 27. Percentile and median differences in box and whisker plots for the GCQ Avoiding score for different rater groupings over time.

If one views the tables of mean scores, the graphs of mean scores and the box and whisker plots, one might conclude, simply upon only the basis of that evidence, that general change over time had occurred. It would seem that the raw Engagement scores went up over the course of therapy, the Conflict scores went down, and the Avoiding scores also were reduced. It also seems that the Engagement scores are the highest for all groups of raters, the Avoiding scores are the lowest and the Conflict scores range between the other two scores. There do not seem to be any glaring differences between the trends of the three different scores over time between the different groups of raters, with three exceptions. Two exceptions are the Conflict and Avoiding scores of the outside observers and therapists as compared to the group members. Another exception is the Conflict scores of the group members who reported possession of a diagnosis of developmental disability compared to the other groupings of raters.

None of the appearances of change over time can be claimed with any certainty without further examination of the data, however.

Tables 25 to Table 31 indicate the observations found from a single-factor repeated measures design Anova which was completed in order to discern whether or not there were significant changes in the raw score ratings of the five groups examined over time.

Any evaluation which included group members excluded the fifth session as the group members did not complete the GCQ for group session five.

Table 25

GCQ Repeated Measures One-Way Anova: All Raters (n = 10)

Score	Source	SS	df	MS	F	p
Engaged	Between People	17.87	9	1.99		
	Between Measures	6.09	3	2.03	6.20	0.002*
	Residual	8.84	27	0.33		
	Total	32.80	39	0.84		
Conflict	Between People	24.74	9	2.75		
	Between Measures	5.75	3	1.92	3.97	0.02*
	Residual	13.03	27	0.48		
	Total	43.53	39	1.12		
Avoiding	Between People	31.24	9	3.47		
	Between Measures	6.36	3	2.12	2.51	0.08
	Residual	22.78	27	0.84		
	Total	60.38	39	1.55		

Note. Null Hypothesis: Mean 1 = Mean 9 = Mean 13 = Mean 17. Alternative Hypothesis: at least two of the four means are not equal.

* $p < .05$, two-tailed.

Table 26

GCQ Repeated Measures One-Way Anova: All Group Members (n = 6)

Score	Source	SS	df	MS	F	p
Engaged	Between People	12.42	5	2.48		
	Between Measures	5.20	3	1.73	5.17	0.01*
	Residual	5.02	15	0.33		
	Total	22.64	23	0.98		
Conflict	Between People	22.42	5	4.49		
	Between Measures	5.95	3	1.98	3.66	0.04*
	Residual	8.11	15	0.54		
	Total	36.49	23	1.59		
Avoiding	Between People	27.31	5	5.46		
	Between Measures	9.77	3	3.26	3.35	0.05*
	Residual	14.60	15	0.97		
	Total	51.69	23	2.25		

Note. Null Hypothesis: Mean 1 = Mean 9 = Mean 13 = Mean 17. Alternative Hypothesis: at least two of the four means are not equal.

* $p < .05$, two-tailed.

Table 27

GCQ Repeated Measures One-Way Anova: Group Members Who Did Report Possession of a Diagnosis of Developmental Disability (n = 3)

Score	Source	SS	df	MS	F	p
Engaged	Between People	5.14	2	2.57		
	Between Measures	1.82	3	0.61	0.96	0.47
	Residual	3.78	6	0.63		
	Total	10.74	11	0.98		
Conflict	Between People	21.57	2	10.79		
	Between Measures	3.17	3	1.06	1.29	0.36
	Residual	4.93	6	0.82		
	Total	29.67	11	2.70		
Avoiding	Between People	17.57	2	8.78		
	Between Measures	8.47	3	2.82	2.90	0.12
	Residual	5.85	6	0.97		
	Total	31.89	11	2.90		

Note. Null Hypothesis: Mean 1 = Mean 9 = Mean 13 = Mean 17. Alternative Hypothesis: at least two of the four means are not equal.

* $p < .05$, two-tailed.

Table 28

GCQ Repeated Measures One-Way Anova: Group Members Who Did Not Report Possession of a Diagnosis of Developmental Disability (n = 3)

Score	Source	SS	df	MS	F	p of F
Engaged	Between People	6.13	2	3.06		
	Between Measures	3.63	3	1.21	7.30	0.02*
	Residual	0.99	6	0.17		
	Total	10.75	11	0.98		
Conflict	Between People	0.76	2	0.38		
	Between Measures	4.73	3	1.58	7.63	0.02*
	Residual	1.24	6	0.21		
	Total	6.73	11	0.61		
Avoiding	Between People	8.70	2	4.35		
	Between Measures	6.59	3	2.20	3.81	0.08
	Residual	3.46	6	0.58		
	Total	18.75	11	1.71		

Note. Null Hypothesis: Mean 1 = Mean 9 = Mean 13 = Mean 17. Alternative Hypothesis: at least two of the four means are not equal.

* $p < .05$, two-tailed.

Table 29

GCQ Repeated Measures One-Way Anova: Therapists and Outside Observers (n = 4)

Score	Source	SS	df	MS	F	p
Engaged	Between People	1.93	3	0.64		
	Between Measures	5.05	4	1.26	7.38	0.003*
	Residual	2.05	12	0.17		
	Total	9.03	19	0.48		
Conflict	Between People	1.70	3	0.57		
	Between Measures	2.93	4	0.73	2.88	0.07
	Residual	3.05	12	0.25		
	Total	7.68	19	0.40		
Avoiding	Between People	4.32	3	1.44		
	Between Measures	0.70	4	0.17	0.39	0.82
	Residual	5.47	12	0.46		
	Total	10.49	19	0.55		

Note. Null Hypothesis: Mean 1 = Mean 5 = Mean 9 = Mean 13 = Mean 17. Alternative Hypothesis: at least two of the five means are not equal.

* $p < .05$, two-tailed.

Table 30

GCQ Repeated Measures One-Way Anova: Therapists (n = 2)

Score	Source	SS	df	MS	F	p
Engaged	Between People	0.45	1	0.45		
	Between Measures	2.66	3	0.89	3.61	0.16
	Residual	0.74	3	0.25		
	Total	3.44	7	0.49		
Conflict	Between People	0.63	1	0.63		
	Between Measures	3.16	4	0.79	2.66	0.21
	Residual	1.19	4	0.30		
	Total	4.98	9	0.55		
Avoiding	Between People	0.54	1	0.54		
	Between Measures	0.73	4	0.18	2.47	0.20
	Residual	0.30	4	0.07		
	Total	1.56	9	0.17		

Note. For the score of Engagement, Group 9 has zero variance. Null Hypothesis: Mean 1 = Mean 5 = Mean 9 = Mean 13 = Mean 17. Alternative Hypothesis: at least two of the five means are not equal.

* $p < .05$, two-tailed.

Table 31

GCQ Repeated Measures One-Way Anova: Outside Observers (n = 2)

Score	Source	SS	df	MS	F	p
Engaged	Between People	1.76	1	1.76		
	Between Measures	1.40	4	0.35	1.50	0.35
	Residual	0.94	4	0.23		
	Total	4.10	9	0.46		
Conflict	Between People	0.63	1	0.63		
	Between Measures	0.69	4	0.17	0.73	0.61
	Residual	0.94	4	0.23		
	Total	2.25	9	0.25		
Avoiding	Between People	4.73	1	4.73		
	Between Measures	0.44	2	0.27	0.43	0.70
	Residual	1.03	2	0.51		
	Total	6.20	4	1.24		

Note. For the score of Avoidance, Group 13 and Group 17 had zero variance.

Null Hypothesis: Mean 1 = Mean 5 = Mean 9 = Mean 13 = Mean 17.

Alternative Hypothesis: at least two of the five means are not equal.

* $p < .05$, two-tailed.

Tables 25 to 31 indicate that there has been significant change over time for all three GCQ raw scores for the rater grouping of all group members. Significant change over time is indicated for only the GCQ scores of Engaged and Conflict for the rater groupings of all raters and group members who did not report possession of a diagnosis of developmental disability. The rater grouping of therapists and outside observers evidenced significant change over time for only the raw GCQ score of Engaged. The rater groupings of therapists, group members who reported possession of a diagnosis of developmental disability, and outside observers were not found to display significant differences in any of the three GCQ scores over time according to the one-way Anova tables.

12. Trend Analyses

Hypothesis 12 stated that significant linear, quadratic and/or cubic trends will be found as a result of trend analyses. Trend analyses examined the shapes of possible curves which may have resulted when the means of the dependent variables (the three raw GCQ rating scores) were plotted for the seven levels of the independent variable (the different groupings of the raters) to see if there were significant differences in the in the possible trends resulting from the independent variables. Trend analyses were performed for the results shown in Table 25 to Table 31 for which significant differences in means of the four rated group therapy sessions were found.

Four ratings (Group One, Group Nine, Group Thirteen and Group Seventeen) for the three GCQ scores of Engaged, Conflict and Avoidance were examined because group members did not evaluate group session five with the GCQ.

Trend analyses were completed for the raw GCQ scores of Engagement, Conflict and Avoidance. A two-way Anova with a repeated measures design evaluated the effect of time (Engagement, Conflict and Avoiding scores for sessions 1, 9, 13 and 17), the effect of status (whether a rating score was done by a group member who reported possession of a diagnosis of developmental disability, a group member who did not report possessing such a diagnosis, a therapist or an outside observer), and the interaction effect of the two factors explained above - if significant differences in means for all the groups of raters named in the brackets above were observed in Tables 25 to Table 31. The interaction effect was the factor of interest for determining significance of results. If this Anova did not yield significant results, or if significant differences in means for all groupings of raters were not observed in the single factor Anovas in Tables 25 to 31, the raters were grouped into group members and therapists/observers and another Anova was performed.

If significant results were found for either of the repeated measures two-way Anovas, the mean squares error (residual) for insertion into the trend analyses equations for the two groups being contrasted (group members and therapists/observers) were taken from the repeated measures one-way Anovas performed before in Table 25 to Table 31. The means used for the trend analyses are taken from Table 23 and Table 24.

Trend analyses were completed for the main effect of time if this effect is observed to be significant in the repeated measures two-way Anovas completed as described in the above four paragraphs in order to assess whether or not there are general significant trends involving all raters related to the GCQ ratings over the four group therapy sessions.

The equation used to determine the observed F, the significance test of the contrasts for the trend analyses, as well as the three sets (linear, quadratic, and cubic) of contrast coefficients utilized for four observation points can be found in Winer (1971).

Table 32 describes the trend analysis completed for the GCQ score of Engagement. Trend analyses evaluating significant differences in trends were not completed for the score of Conflict and Avoiding because the two different groupings of raters did not have significant differences in means observed in Tables 25 to 31

Table 32

GCQ Engagement Score Repeated Measures Two-Way Anova

Source	*df*	*MS*	*F*	*p*
Within Cells	24	0.28		
Time	3	1.89	6.79	0.002*
[a]Status x Time	3	0.73	2.61	0.075*

Trend Analysis Summary

1. Status x Time

	Group Members				Therapists/Observers			
Source	*df*	*MS*	*F*	*p*	*df*	*MS*	*F*	*p*
Linear	1, 15	0.33	14.69	<0.01**	1, 12	0.17	7.06	<0.025**
Quadratic	1, 15	0.33	0.20	>0.25	1, 12	0.17	7.78	<0.025**
Cubic	1, 15	0.33	0.65	>0.25	1, 12	0.17	3.20	>0.1

2. Time

Source	*df*	*MS*	*F*	*p*
Linear	1, 3	5.85	20.89	<0.025**
Quadratic	1, 3	0.3	1.07	>0.25
Cubic	1, 3	0.01	0.04	>0.25

Note. [a]Status = group members and therapists/outside observers.

* Because of the exploratory nature of the work a *p* <.10, two-tailed significance level was used.

** *p* < .05, two-tailed.

(inclusive) for all of the participants involved.

As can be seen in Table 32, the two-way Anova which was to test for differences between the group members and therapists/outside observers did yield significant results for the interaction factor. Therefore a trend analysis was completed for those two different groups.

The trend analyses summary in Table 32 indicates that a significant linear trend was observed for the group members' Engagement raw scores. Figure 24 indicates an upward direction or an increase in the scores. The trend analyses also shows that significance is indicated for the therapists and outside obervers grouping for both a linear and a quadratic trend. Figure 21 demonstrates an upward direction of the Engagement scores over time, indicating an increase. This trend analysis indicates that the trends are different between the group members and the therapists/outside observers for the score of Engagement. This difference can be viewed in visually comparing Figure 24 (group members) with Figure 21 (observers and therapists).

Table 32 also indicates that a significant linear trend was observed for the main effect of time (over four group therapy sessions). Figure 20 demonstrates this linear trend in an upwards direction, indicating an increase in Engagement scores.

Significant differences were found in means involving evaluations of Conflict for all raters (see Table 25), group members (see Table 26), and group members who did not report possession of a diagnosis of developmental disability (see Table 28). Therefore, trend analyses involving the main effect of time were completed for this score for the above groupings of raters. Table 33 describes these trend analyses. Note that the Mean Squares Error of the trend analyses calculations were taken from the Residual entry of Table 25, Table 26 and Table 28 for each of the above noted groupings of raters, respectfully.

As can be seen in Table 33 significant linear trends for the main effect of time for the score of Conflict were observed for the rater groupings of all raters, group members and group members who did not report possession of a diagnosis of developmental disability. In viewing Figure 20, Figure 24, and Figure 23, the reader can see that the trends are shown to be in a downwards direction, indicating a decrease in the raw Conflict scores over time.

Tables 25 to 31 (inclusive) indicate that significant differences in means for the score of Avoiding were only found for the group members (n = 6), so a trend analysis for the main effect of time was completed for just this grouping of raters. Table 34 describes this trend analysis.

For the GCQ raw score of Avoiding, Table 34 indicates that no significant trends are observed.

Table 33

GCQ Conflict Score Time Main Effect Trend Analysis

Trend Analysis Summary

	All Raters				Group Members			
Source	df	MS	F	p	df	MS	F	p
Linear	1, 3	4.81	10.01	<0.05*	1, 3	5.42	10.03	<0.05*
Quadratic	1, 3	0.225	0.47	>0.25	1, 3	0.48	0.89	>0.25
Cubic	1,3	0.72	1.50	>0.25	1, 3	0.02	0.03	>0.25

Group Members Who Did Not Report Possession of a Developmental Disability

Source	df	MS	F	p
Linear	1, 3	3.53	16.81	<0.05*
Quadratic	1, 3	0.54	2.57	>0.10
Cubic	1, 3	0.69	3.30	>0.10

Note.

* $p < .05$, two-tailed.

Table 34

GCQ Avoiding Score Time Main Effect Trend Analysis

Trend Analysis Summary

		Group Members		
Source	df	MS	F	p
Linear	1, 3	6.95	7.16	>0.05
Quadratic	1, 3	2.44	2.52	>0.10
Cubic	1, 3	0.34	0.35	>0.25

Note. * $p < .05$, two-tailed.

E. HIM-G Data Analysis

The HIM-G data analysis is composed of three hypotheses. The first hypothesis (Hypothesis 13) concerns a graphical portrayal over time of the Content/Style, Work/Style, Quadrant/Style, and Therapist/Member Ratio scores in percentile equivalents with regard to the HIM reference data. A post hoc comment is offered with reference to two Quadrant scores which were not included within the hypothesis statement. The second hypothesis (Hypothesis 14) examines percent scores for the Therapist/Member Ratio, the Intra-group Ratio, and the Risk Ratio over time in a graphical manner. Any other statistical evaluations for change are not recommended due to there being only one score for each HIM-G measure from two raters evaluating the groups.

The third hypothesis examined within the HIM-G data analysis concerns whether or not the observed HIM-G scores are comparable with the reference data.

13. Change over Time Indicated in Percentile Equivalents

Hypothesis 13 stated that change over time would be observed in graphs of HIM-G scores expressed in percentile equivalents regarding the HIM reference data. These changes were hypothesized to take the form of an increase in Quadrant 4 scores, the Confrontive (E) Work score, the Relationship (IV) Member-Centred score and the Group (II) Topic-Centred score. A decrease in Pre-Work scores (Conventional - B, and Assertive - C), Quadrant 1 scores, the Topics (I) Topic-Centred score, the Speculative (D) Work score, and the Personal (III) Member-Centred score was also part of Hypothesis 13..

Means and standard deviations of Content Style, Work Style and the four quadrants of each of the rated group sessions are presented in Table 35.

In order to analyse the data accumulated by two outside observers rating five group sessions (sessions 1, 5, 9, 13 and 17), the means of the ratings are converted into percentiles and plotted on a "quasi-normative" (Hill, P., 1964, p. 5) chart for each HIM-G score to show change over time (see Figures 28 to 30).

Most graphical portrayals are in line with Hypothesis 13.

The Quadrant One scores reflect what Hill and Gruner (1973) describe as the

> ...orientation phase of development, since it includes pre-work interaction that is characterized by discussion of topics that are nonmember-centered and superficially concerned with group matters...In other words, Quadrant 1 reflects attempts of the group to establish a structure; members are trying to find themselves in the scheme of things (p. 359).

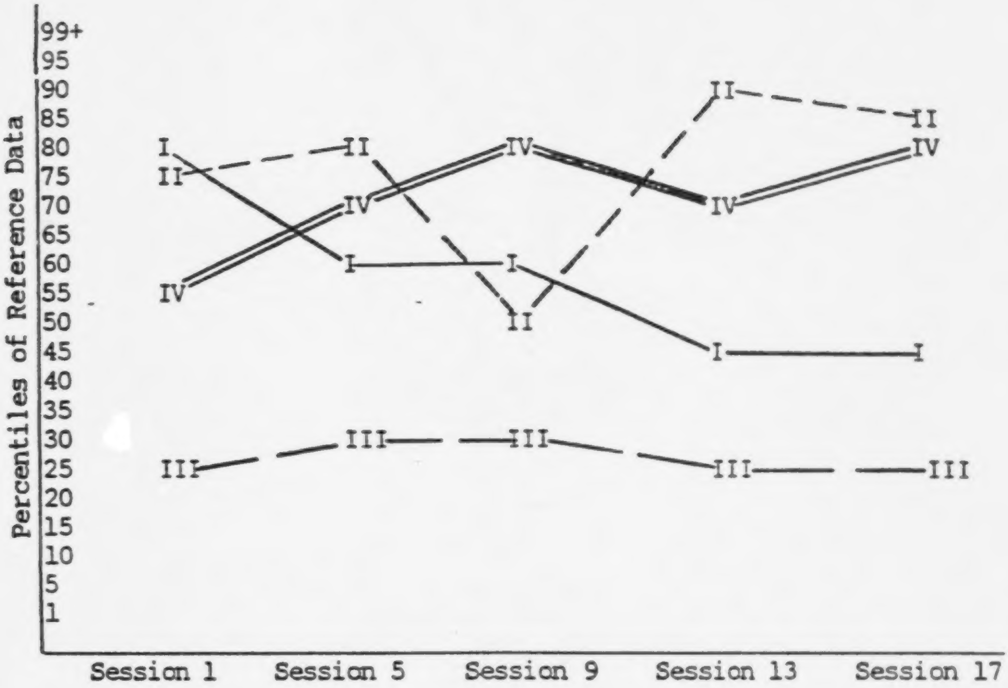
Table 35

HIM-G Means And Standard Deviations for Five Group Sessions:

Content/Style, Work/Style, Quadrant/Style

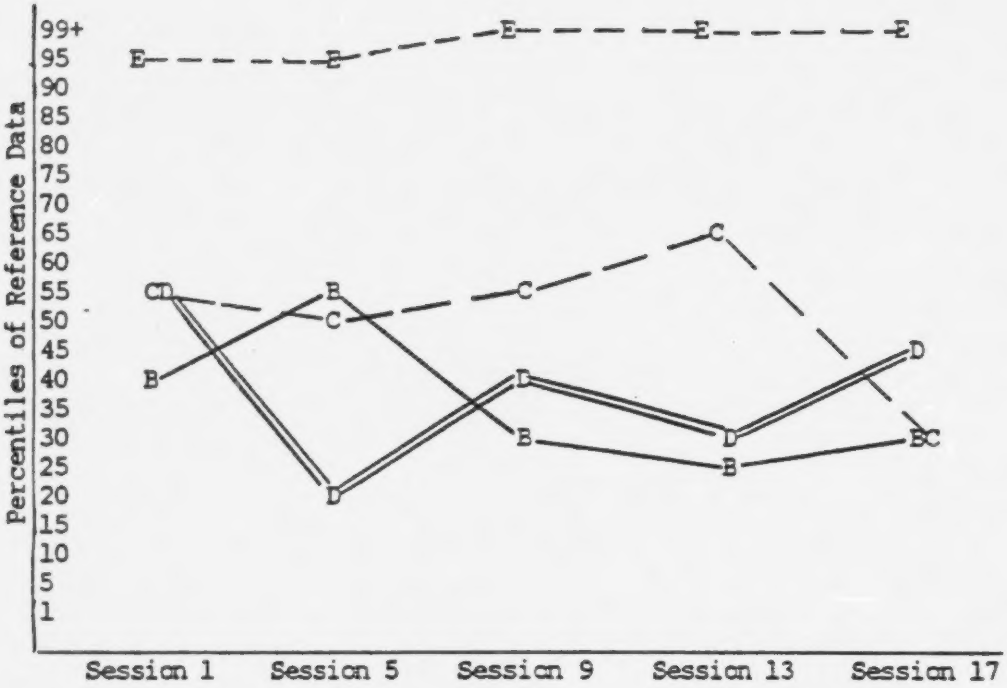
	Session 1		Session 5		Session 9		Session 13		Session 17	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Content/Style										
I	34.50	6.71	22.88	5.75	22.73	0.06	16.41	0.57	13.98	4.37
II	16.64	9.20	17.31	3.47	8.60	0.96	25.37	2.60	23.85	2.67
III	26.13	4.22	30.60	4.33	28.03	3.39	27.05	0.22	23.47	0.42
IV	22.75	1.73	29.21	4.89	37.41	2.50	31.19	2.24	37.20	0.85
Work/Style										
B	21.91	0.55	32.53	8.20	19.72	1.28	12.73	1.03	14.74	0.16
C	10.88	2.52	10.43	2.05	11.16	3.17	13.91	1.83	6.02	0.11
D	50.28	4.86	35.67	5.56	45.45	0.13	39.39	2.53	48.33	3.95
E	16.94	2.91	21.37	0.58	23.68	4.32	33.99	1.72	30.86	3.97
Quadrant/Style										
1	19.41	0.39	21.29	6.31	16.21	3.32	13.11	0.70	8.61	1.82
2	31.72	1.89	18.90	2.92	16.66	0.24	28.27	0.76	29.22	3.52
3	13.38	2.56	21.67	0.16	16.21	3.32	13.13	0.46	10.94	0.06
4	35.49	0.07	38.15	9.06	52.47	4.22	45.11	1.57	50.02	3.48

Note. scores are expressed in percentages.



Content/Style Mean Scores: I(Topics), II(Group), III(Personal) and IV(Relationship).

Figure 28. Reference data percentile equivalents for Content/Style HIM-G mean scores over five group therapy sessions.



Work/Style Mean Scores: B(Conventional), C(Assertive), D(Speculative), E(Confrontive).

Figure 29. Reference data percentile equivalents for Work/Style HIM-G mean scores over five group therapy sessions

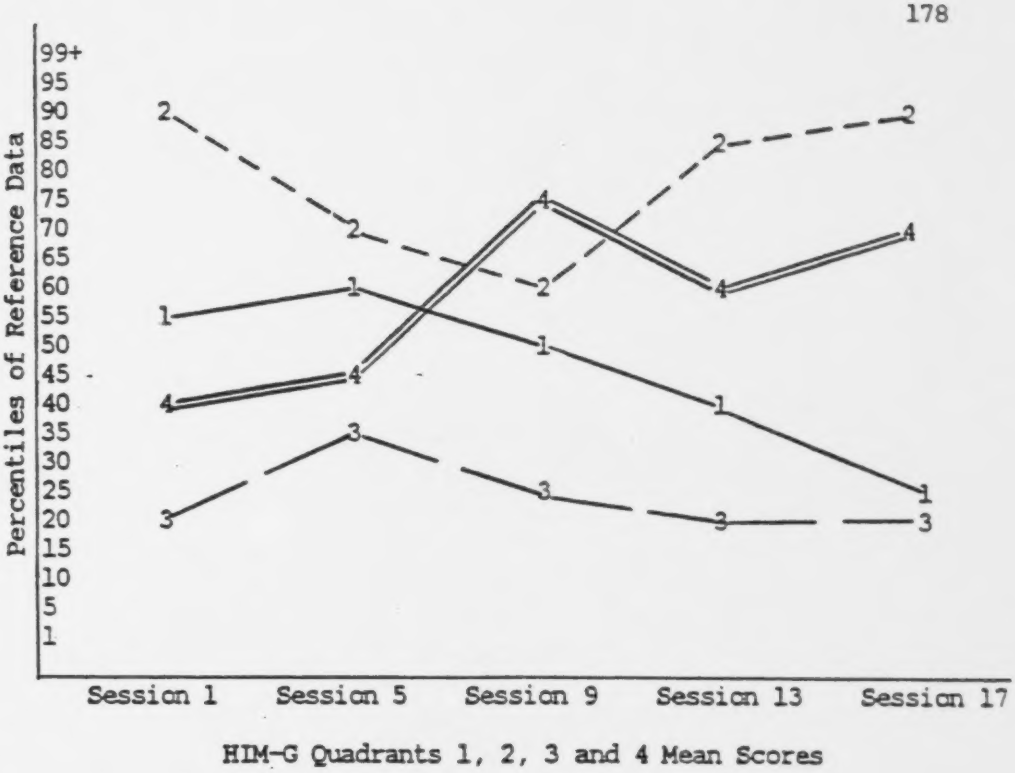


Figure 30. Reference data percentile equivalents for Quadrant/Style HIM-G mean scores over five group therapy sessions.

The authors also state that Quadrant 1 has a socializing function and lays a base for cohesion and development, but lacks the risk and effort required in the later group stages.

It was hypothesized that the Quadrant 1 scores would decrease. Figure 30 demonstrates visually this decrease in Quadrant 1 scores over time.

As can be seen in Figure 30, there has been an increase in the Quadrant 4 scores, as was hypothesized. Quadrant 4 is composed of III and D (Personal and Speculative), IV and D (Relationship and Speculative), III and E (Personal and Confrontive), and IV and E (Relationship and Confrontive). Hill and Gruner (1973) describe Quadrant 4 as representing "...the third or 'production' phase of purposive group development" (p. 361). Therefore it may be said that the integrated group increased in production - what Hill and Gruner specify as decision-making, problem-solving and here-and-now work individually and as a group. According to Figure 30, the most productive work was done in the middle group session.

The Pre-Work scores, which were hypothesized to have decreased are: Conventional (B), and Assertive (C). The Conventional scores, as one can view in Figure 29 do seem to have decreased overall after an initial ascending at session five. These results indicate that socially acceptable exchanges, gossip, etc. decreased over time.

The Assertive scores, shown in Figure 29 indicate a stability in the first three sessions which were evaluated, a peak at session 13 to percentile 65 and a drastic decrease at the last session. These results indicate that self assertion without the playing of the patient role in seeking aid in order to attain self-understanding (Hill, 1965) remained stable, peaked, and then dropped off sharply to the thirtieth percentile at the last group gathering.

The Topic-centred score of Topics (I) was also hypothesized to have decreased over time. The Topics score, as can be viewed in Figure 28, does seem to have decreased quite drastically over the course of time, indicating a decrease in the amount of talk regarding external events or subjects which are away from the group.

The Group (II) Topic-centred score which was hypothesized to have increased can also be viewed in Figure 28, seems to have begun with a mean percentile score which is close to 80, dipped quite a lot at session nine to the forty-fifth percentile, and then increased to above the eighty-fifth percentile at session 13. At session 17 this score seems to have decreased slightly from where it was at session 13, but not dramatically. These results indicate that the integrated group may have been experiencing fluctuations in talk about the group and what the group was doing, with an eventual slight increase.

The Work score of Confrontive (E) was hypothesized to increase. As shown in Figure 29, confrontation seems to have remained quite stable at a high level, and experienced a slight fluctuation upwards during the ninth group session. These results suggest that confrontation, which involves high personal risk, in the group sessions was at a high level and remained there over the course of therapy - increasing slightly near the middle of the sessions.

The Speculative (D) Work score was hypothesized to have decreased over time. As the reader can see in Figure 29, the Speculative scores fluctuated. This score began at an average level of a percentile score which was just above 50, went down to around the thirty-fifth percentile, back up close to 45 at group session nine, down to around the thirty-ninth percentile in session 13, and then began to approach the initial percentile score with 48.33 for the last session. These results suggest that over time, what Hill and Gruner (1973) describe as the "...'conventional' way of transacting therapy, i.e., playing the therapeutic game" (p. 359), in the safe, intellectual pursuit of speculation across the different Content/Styles fluctuated and eventually decreased slightly over time.

The Member-centred Relationship (IV) score, indicated in Figure 28, was hypothesized to increase over time. This score reflects a 'here-and now' orientation in talk of relationships and reactions of group members to each other (Hill, 1977) and indicates a fluctuation over time, but an overall increase from the beginning group session to the last. Relationship is described by Hill (1965) as the highest Content/Style category. The scores for Relationship in the integrated group were all around or just below the eightieth percentile, indicating that in the group this area was concentrated upon.

The Personal (III) Member-centred score was hypothesized to decrease over the course of time. This score refers to talking about the problems of a member in a historical manner. The results show that their trend seems to be relatively stable - with a slight increase near the middle of the sessions. The low level of the Personal scores appear to demonstrate that this area was not a priority for the integrated group. The hypothesis of a decrease in this score was disproven, because no decrease is evident. However the score did not dramatically increase, either.

Post Hoc Comment

Although not included in the hypothesis statement the Quadrant 2 and Quadrant 3 scores are worthy of note. Both are shown in a graph representation in Figure 30. Quadrant 2, which is described by Hill and Gruner (1973) as made up of member-centred prework/styles in which "...techniques are learned which permit the individual and the group to maintain or reinforce their identities. Further...individuals generally introduce their problems in an attempt to resolve frustration, individual differences, and hostility" (p. 360). The Quadrant 2 scores seem to have gone from a relatively high score at the beginning of the sessions, dipped quite drastically, and then ascended to approximately the beginning level near the end of the sessions.

The Quadrant 3 scores appear to have gone up slightly to 35 in session five from a percentile mean of around 20 in session one, and then gradually decreased back to the beginning level across the remainder of the group sessions. Hill and Gruner say that Quadrant 3 is the second part of the exploration phase in which work/style activities are not member-centred and "...provide the group with the opportunity to establish member and leader role-taking techniques" (1973, p. 360). The group is said to begin to assume the responsibilities of group interaction.

14. Change Over Time Indicated in Three Percent Scores

Hypothesis 14 stated that for three scores which can be compared to further characterize the group (two of which are not provided in reference data form) change over time would be observed. These changes were hypothesized to take the form of the Risk Ratio increasing, the Intra-Group Ratio increasing, and the Therapist Activity score decreasing.

Table 36 describes the means and standard deviations for the scores of: Therapist Activity, Risk Ratio and Intra-Group Ratio.

Table 36

HIM-G Means And Standard Deviations for Five Group Sessions: Therapist Activity, Risk Ratio and Intra-Group Ratio

	Session 1		Session 5		Session 9		Session 13		Session 17	
	M	SD	M	SD	M	SD	M	SD	M	SD
Therapist Activity	0.05	0.02	0.05	0.01	0.05	0.01	0.05	0.01	0.04	0.06
Risk Ratio	0.04	0.10	0.05	0.06	0.05	0.03	0.09	0.13	0.06	0.10
Intra-Group Ratio	0.07	0.30	0.09	0.01	0.09	0.12	0.13	0.01	0.16	0.22

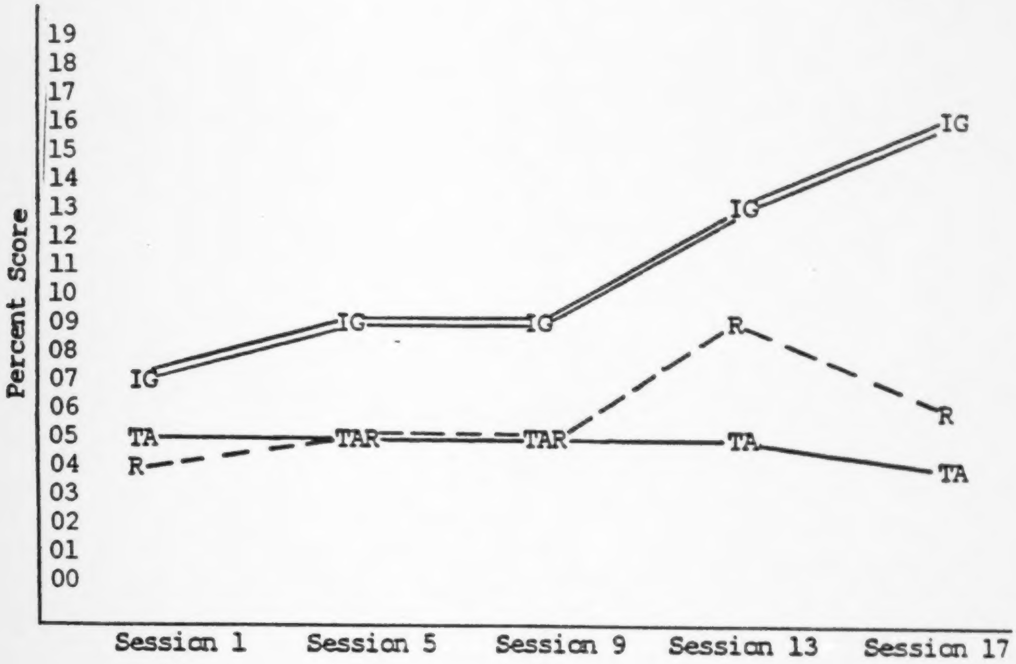
Note. Scores are expressed in percentages.

The reason for the elimination of the Intra-group Ratio and the Risk Ratio from the percentile equivalent analysis (see Hypothesis 13) is because the two scores do not have 'quasi-normative' references within the HIM - Hill Interaction Matrix publication (Hill, 1965), nor are these two scores included within the reference data study of P. Hill (1964). These two ratio scores are, however presented in comparison with each other and the Therapist Activity score in Figure 31. Figure 32 describes the percentile equivalents for the Therapist Activity score regarding the reference data.

The Therapist Activity score over time which compares the therapists' participation to that of the group members can be seen in Figure 31 and Figure 32 to have remained stable at an approximate percentage score level of 5%, and decreased slightly at the last session to around 4%.

The Intra-Group Ratio which compares the amount of interaction in the Group and Relationship categories (the internal group areas) with the Topic and Personal categories (the external areas), (Hill and Gruner, 1973), is described in Figure 32 to have increased sharply over time throughout the group sessions. This increase indicates that the hypothesis of an increase in this score was correct - that concentration on areas internal to the group versus areas which were external to the group increased over the course of the sessions.

The Risk Ratio is said by Hill (1969) to compare the volume of participation in Assertive and Confrontive to the volume in Conventional and Speculative. The Assertive and Confrontive categories are considered to involve more risk. The Conventional



Therapist Activity score (TA), Intra-Group Ratio (IG) and Risk Ratio (R) Mean Scores

Figure 31. Comparison of Therapist Activity, Intra-Group Ratio and Risk Ratio mean scores over five group sessions.

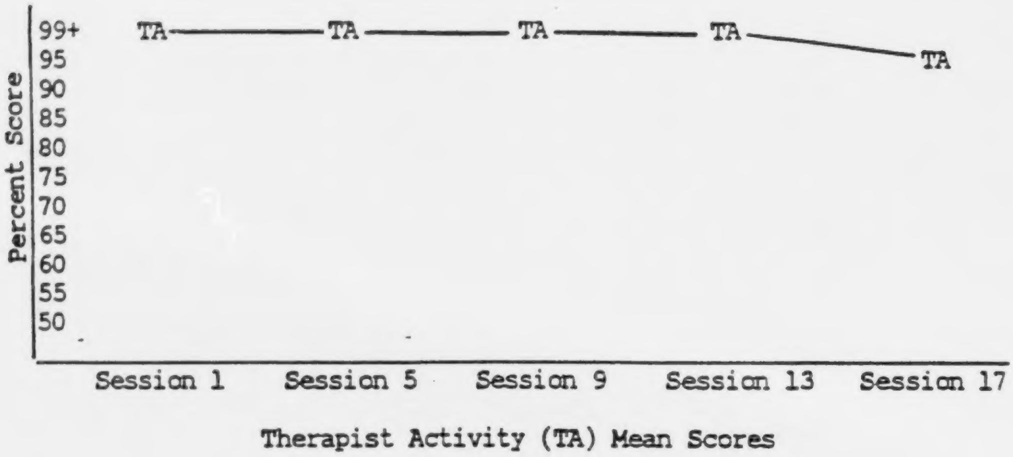


Figure 32. Reference data percentile equivalents for Therapist Activity mean scores over five group therapy sessions.

and Speculative areas are considered to be safer categories of interaction. As the hypothesis stated, the Risk Ratio increased over time (see Figure 32), but indicated a decrease in the last session.

15. Scores Comparisons with HIM Reference Data

Figures 28, 29, 30, and 32 indicate the average range of scores to be found within the reference data by the placement of boundaries which indicate the eightieth percentile (as the upper boundary), and the twentieth percentile (as the lower boundary). However, further evaluation is necessary in order to determine whether or not the found HIM-G scores vary significantly from the reference data.

In order to evaluate Hypothesis 15 which stated that no significant differences would be found for the obtained HIM-G scores as compared to the reference data, z-tests were performed. The findings from these analyses are presented in Table 37.

Only two scores were observed to have z-test results which demonstrated that they were found to be significantly different than the reference data. The fact that the z-tests in Table 37 indicate that both the Confrontive and Therapist Activity scores were significantly different from the reference data and the graphs of the two scores in Figures 29 and 32 (respectfully) show that both scores were above the eightieth percentile regarding the reference data might lead one to believe that the therapists influenced the confrontation occurring in the groups. This may be true. Cause and effect are beyond the scope of this study. However, it is possible to examine other plausible areas of interaction evaluated by the HIM-G which may have occurred in concert with high Confrontation and Therapist Activity scores.

The integrated group was found to have high Relationship and Group scores - indicating that these areas were high priorities. This is also reflected in the rise of the Intra-Group Ratio over time. Concentration of activities seemes to have been upon what

Table 37

HIM-G Scores Compared to Reference Data with z-tests

HIM-G Scores	Obtained z				
	Session 1	Session 5	Session 9	Session 13	Session 17
Content/Style					
I	0.93	-0.03	-0.04	-0.56	-0.76
II	0.60	0.69	-0.45	1.75	1.55
III	-1.25	-0.96	-1.12	-1.19	-1.42
IV	0.15	0.68	1.36	0.85	1.35
Work/Style					
B	-0.60	0.13	-0.75	-1.23	-1.09
C	-0.44	-0.49	-0.41	-0.10	-0.98
D	-0.007	-1.05	-0.35	-0.79	-0.15
E	2.90*	4.08*	4.70*	7.46*	6.62*
Quadrant/Style					
1	0.06	0.26	-0.29	0.08	-1.12
2	1.42	0.26	0.05	1.11	1.20
3	-1.34	-0.46	-1.04	-1.37	-1.60
4	-0.37	-0.19	0.82	0.30	0.65
Therapist Activity					
	3.54*	4.39*	4.27*	3.62*	2.59*

Note. * $p < .05$, two-tailed. Critical z = 1.96. Null Hypothesis: Sample Mean - Reference Data Mean = 0. Alternative Hypothesis: Sample Mean - Reference Data Mean < or > 0.

the group was doing and members relationships to each other.

The dip in the Group scores in the middle session occurred when there was also an decrease in Quadrant 2 scores - which describes learning to maintain or reinforce identities and attempts to resolve frustration, individual differences and hostility. The Quadrant 4 (production) scores increased slightly at this time.

The combination of high Relationship, Group and Quadrant 2 scores could culminate to some maintainance of confrontation within the group along with a high level of therapist participation.

The Assertive Pre-Work score increased in session thirteen - at the same time as the Quadrant 2 and the Group scores increased. Apparently at this time self assertion without receiving help from the group in a patient role, what the group was doing, and exploring identity maintainance as well as perhaps resolving frustations, individual differences or hostilities were priorities. This was the time that the Quadrant 4 was found to dip slightly - indicating a slight decrease in group production as well.

In the last group session, the integrated group's concentrations seem to have been upon production (Quadrant 4), Group, Relationship, and Quadrant 2 interactions. Assertive scores dropped off at this time. An increase in the Speculative mean score is observed in Figure 38. A higher level of risk is indicated in the last session than in sessions one, five and nine, but much lower than in session thirteen. Risk is described by the Risk Ratio in Figure 31.

F. Correlational Analysis

16. Correlation Matrix Analysis

In answer to the research question of whether or not there is association between any changes observed, a correlation matrix was constructed of the following scores (and in the following order to indicate any changes over time):

a) the General Severity Index (GSI) pretest score from the Brief Symptom Inventory (BSI),

b) the mid-point Achievement rating from the Target Goals,

c) the pretest Overall Score from the Social Adjustment Scale - Self Report (SAS-SR),

d) to o) the Engagement, Conflict and Avoidance scores from the GCQ, in respective order for the five group therapy sessions evaluated beginning with the first session's three scores and ending with the seventeenth session's three scores,

p) the GSI post test score from the BSI,

q) the end-point Achievement rating from the Target Goals and

r) the post test Overall Score from the SAS-SR.

The above list of scores will be hence forth referred to as the current study's Summary Scores, for they are intended within this correlation matrix analysis to represent all other associated scores evaluated within the same test or rating scale.

Hypothesis 16 stated that trends of significant correlations would be found. Using only observed correlations from the resulting matrix which were significant at the 0.05 alpha level, an attempt was made to discern whether or not trends could be observed over time.

Figure 33 indicates the significant correlations utilized in the analysis described immediately above.

Note that any suggestions of trends of increasing or decreasing absolute values of correlations must consist of correlations which are adjacent in time. For example, all of the pre-tests were completed at approximately the same time, so it is not logical to look for trends within those three tests presented in the matrix (they are labelled with the suffix 'Pre' in Figure 33). It would make more sense to look for increasing or decreasing value patterns, for example, of one pretest and one post test of the same type correlated with a pre-test or post test

Summary Scores	BSI Pre	SAS Pre	Eng Gr 1	Con Gr 1	Avo Gr 1	Eng Gr 9	Con Gr 9	Avo Gr 9	TG Mid	Eng Gr 13	Con Gr 13	Avo Gr 13	Eng Gr 17	Con Gr 17	Avo Gr 17	TG Post	BSI Post	SAS Post
BSI Pre	--		*0.69					*0.85									**0.81	
SAS Pre		--							*-0.76								*0.72	*0.66
Eng Gr 1			--						*0.71				**0.95					
Con Gr 1				--			**0.97											
Avo Gr 1					--					*0.75								
Eng Gr 9						--												
Con Gr 9							--				*0.87							
Avo Gr 9								--										
TG Mid									--									
Eng Gr 13										--							*-0.78	
Con Gr 13											--						*0.76	*0.75
Avo Gr 13												--						
Eng Gr 17													--					
Con Gr 17														--	*0.80			
Avo Gr 17															--			
TG Post																--		
GSI Post																	--	
SAS Post																		--

Legend

*$p < 0.05$, two-tailed. ** $p < 0.01$, two-tailed. All nonsignificant interactions were omitted. Pre = Pre-test. Post = Post test. GSI = General Severity Index, Brief Symptom Inventory. TG Mid = Target Goals Achievement, Mid-point. TG Post = Target Goals Achievement, End-point. SAS = Social Adjustment Scale, Self Report, Overall Adjustment Score. Eng =Engagement, GCQ. Con = Conflict, GCQ. Avo = Avoidance, GCQ. Gr 1 to Gr 17 = Group therapy sessions one to seventeen.

Figure 33. Correlation matrix of summary scores over time.

score or of GCQ ratings which follow one another in time (group sessions 1, 9, 13 and 17) of the same type (Engagement, Conflict or Avoidance) correlated with another GCQ rating score.

Following the guidelines stated immediately above, most configurations located in the above matrix which may suggest any sort of pattern or trend are composed of only two correlations, Examples are presented in Table 38 and Table 39 and indicate all such patterns or trends present in the correlation matrix

Table 38

Examples Of Correlation Patterns Which Have A Downward Trend In Absolute Value Over Time

Example 1

Summary Scores	Con Gr 1	Con Gr 13
Con Gr 9	**0.97	*0.87

Note. All nonsignificant interactions were omitted. Patterns are read left to right. Con = Conflict (GCQ). Gr 1 to Gr 17 = Group therapy sessions one to seventeen.

*$p < 0.05$, two-tailed. ** $p < 0.01$, two-tailed.

Table 39

Examples Of Correlation Patterns Which Have an Upward Trend in Absolute Value over Time

Example 1

Summary Scores	BSI Pretest	BSI Posttest
SAS Pretest	*0.69	*0.72
BSI Posttest	**0.81	

Note. All nonsignificant interactions were omitted. Patterns are read from top to bottom and from left to right. BSI = General Severity Index, (BSI). SAS = SAS-SR, Overall Adjustment Score. *$p < 0.05$, two-tailed. ** $p < 0.01$, two-tailed.

presented in Figure 33. Since the correlational trends shown in Tables 38 and 39 are made up of only two correlations each, they cannot logically be described as certain 'trends' of correlations.

All other seemingly upward or downward patterns have to do with mixed types of tests or rating scores. For example (using the coding system presented in Figure 33): mixing a pre-test (BSI Pre) and a GCQ rating (Eng Gr 13) correlated with the BSI Post test score seems to indicate a downward trend with the respective absolute values of 0.81 and 0.78. However, the mixing of types of tests is not logical since they are not measuring similar traits or behaviors.

Count of Therapeutic Factors

Tomasulo and Razza (1992, September) describe fourteen therapeutic factors. They describe a therapeutic factor as a group component which benefits a member's condition. The therapeutic factors they describe are: 1) Acceptance/Cohesion, 2) Universality, 3) Altruism, 4) Installation of Hope, 5) Guidance, 6) Vicarious Learning, 7) Self-understanding, 8) Learning From Interpersonal Action, 9) Self-disclosure, 10) Catharsis, 11) Corrective Recapitulation of the Primary Family, 12) Existential Factors, 13) Imparting of Information and 14) Development of Social Skills.

Factors 1) to 10) are taken from Bloch and Crouch, 1985. Factors 11) to 14) are taken from Yalom, 1985 (Tomasulo, 1992, September).

The author of the present study counted the incidences of each therapeutic factor in the five group sessions evaluated for the data analyses, (group sessions 1, 5, 9, 13, and 17). Total counts were made, as well as counts of incidences for each of the integrated groups of people (those who did and did not report possession of a diagnosis of developmental disability).

It is admitted that the counting of the therapeutic factors was a subjective endeavour as the person who completed the count was a co-therapist. Of course the author would be subject to being affected by her interest in the study. However, every attempt was made to be objective in the evaluations of the incidences of each factor.

An original count was made, and then the author did the count again, compared results, evaluated discrepancies, and made determinations in order to resolve any differences between the two counts. A final review was done of the entire procedure, which actually entailed completing a third count.

Statements included in the interpretations of each therapeutic factor ranged in length from one four word phrase to statements of 200 words. In some cases more than one therapeutic factor was interpreted to exist in one statement. No more than three factors were ever included in one statement. Statements which included more than one therapeutic factor usually were longer than 40 words.

Each therapeutic factor is defined in detail below. Tomasulo (1992) describes Acceptance/Cohesion:

> Members feel a sense of belonging and being valued by each other. Often, members begin looking forward to the group meetings and show up early to set the chairs in a circle. They speak of membership in the group with a sense of pride and importance. There is a value placed on being part of the group and in turn, attendance at the regular meetings creates

a feeling of membership (p. 17).

Bloch and Crouch (1985) describe research studies (Danet, 1969; Snortum & Myers, 1971; Smith, 1970) which have linked self-disclosure, interaction and conditions for change with cohesiveness. This author contends that evidence of Cohesion/Acceptance can be found in the demonstration of all of the other factors, as well as in and of itself. For this reason the counts of the other thirteen factors were included in the count for Acceptance/Cohesion - with additional incidences pertaining only to Factor 1.

Factor 2, Universality is described by Tomasulo as "The discovery that one's issues, problems, perceptions and/or concerns are not unique. Once members know that others can relate to them there is relief in the kinship" (1992, p. 17).

Altruism is Factor 3. Tomasulo says

> Members learn how good it feels to be helpful to others in the group....When one member moves their chair for another, when someone passes a box of tissues to a member because he/she is crying, and when one member volunteers to double for another, these are all examples of altruistic behaviors. (1992, p. 17)

In addition to Tomasulo's definition, this author specifically incorporated ideas from Bloch and Crouch (1985) into

Factor 3. They specify support, reassurance, suggestions, or comments which help other group members. They say that one feels a sense of being needed and helpful and that one can forget about the self in favour of another member. Also, Bloch and Crouch state that the member recognizes the desire to do something for a fellow member.

Factor 4, Installation of Hope is defined by Tomasulo as "Members will express optimism about their being in the group as well as optimism gained from witnessing change in others" (p. 17). Bloch and Crouch (1985) specify that the group members see that the group can be helpful in accomplishing their goals and that members are optimistic about the group's ability to help them.

Guidance, Factor 5 is defined by Tomasulo (1992)

> Members receive useful information in the form of advice, suggestions and examples from other members. The power of having guidance come from other members rather than the facilitator is usually evidenced by less resistance. It is important to ascertain whether the advice is truly helpful. Often, advice may not be helpful, especially if support is not given first. (p. 18)

Factor 6, Vicarious Learning is "When members do witness others develop (either through a role-play or by relating an experience) the ability to learn from these observations is a form of identification" (Tomasulo, 1992, p. 18). Bloch and Crouch (1985) say that vicarious learning is that which comes from the observer's identification with a fellow patient's specific experience in therapy.

Self-understanding, or Factor 7 is defined by Tomasulo (1992) as

> Members learn something important about themselves through feedback from others in the group. On occasion, the feedback may be confrontational yet constructive. It appears that even if the feedback is uncomfortable, it may be accepted in the hope of gaining some insight about one's self. (p. 18)

Bloch and Crouch (1985) detail the gains in insight one makes as a result of self-understanding. They describe learning how one comes across in the group, learning more clearly about the nature of one's problem and learning why one behaves the way one does.

Tomasulo (1992) defines Learning from Interpersonal Action (Factor 8)

> Learning takes place as a by-product of trying to adapt and relate constructively to the group. The format of the group allows for a relatively high degree of structure within which the group norms are set and members can learn through interaction how best to accomodate to the norms. (1992, p.

18).

Bloch and Crouch (1985) specify attempts to relate positively and constructively within the group by initiating some behavior or response. This author interpreted the initiation of new behavior as a part of Factor 8 even if a member was asked to do something by a therapist. The important component was that the behavior was attempted.

Self-disclosure as defined by Tomasulo (1992) is "any input into the group....The information does not have to be emotionally charged nor insightful" (p. 18). Bloch and Crouch (1985) define self-disclosure as the revealing of personal information.

Factor 10, Catharsis is said by Tomasulo (1985) to be "a release of an intense feeling within the group that brings about a relief for the person expressing it" (p. 18). Tomasulo asserts that Catharsis does not necessarily have to involve a negative emotion.

Corrective Recapitulation of the Primary Family is Factor 11. Tomasulo (1992) describes the degree to which this factor occurs as largely interpretive. It, he says "refers to the ability of a member to 'work through' the feelings established in the family of origin and come to a corrective understanding of those feelings within the group...the introduction of **ANY** information about family members or family life is considered to be related to this factor" (p. 19).

Tomasulo (1992) defines Factor 12, Existential Factors as: "The common bonds of inevitable death, loneliness and suffering are shared by group members" (p. 19).

Factor 13, Imparting of Information is defined by Yalom (1985) as: "didactic instruction about mental health, mental illness and general psychodynamics by the therapists, as well as advice, suggestions, or direct guidance about life problems offered either by the therapist or by other patients" (p. 9). In order to construct this factor so it did not overlap with the Guidance factor (Factor 5), this author defined it as any didactic instruction offered by therapists or group members - often pertaining to enhancing the understanding of other group members regarding a concept being discussed.

The last factor, Development of Social Skills, is defined by Tomasulo (1992) as referring to feedback available to group members regarding social interaction.

The therapists were included in the counts of only the first factor, Factor 13 and Factor 14. The reason for this is that the evaluation of most factors was a therapeutic interpretation and the author (who performed the factor count) was one of the therapists who was familiar with her own and, to a certain extent, the motivations of her co-therapist. This close familiarity with one's own motivations could colour the count of therapeutic factors in one's favour. For example, the smallest utterance (such as 'yeah') could have been utilized to reinforce and to guide a person to continue along in an area which they had intiated, to acknowledge, or to place value on a member's assertions.

Factors 13 and 14 are areas in which identification is behaviorally evident from the transcripts because they are overt (teaching and giving feedback in social areas). Factor 1 simply combines the count for Factor 13 and Factor 14 for the therapists without the addition of any other incidences pertinent to Acceptance/Cohesion (which it does for the group members).

Table 40 describes the results of the counting by this author of the incidences of the fourteen therapeutic factors identified in this study in the five groups observed (Group One, Group Five, Group Nine, Group Thirteen and Group Seventeen) in order of greatest total incidence to lowest total incidence. Appendix K describes absenteeism according to groupings of whether or not absent group members reported possessing a diagnosis of developmental disability or not. Table 41 displays the means and standard deviations of the incidences of each factor throughout the five evaluated sessions, again in order from greatest total incidence to least total incidence.

The presenting of the therapeutic factors in rank order is an

Table 40

Legend of Therapeutic Factors

Therapeutic Factor Numbers	Therapeutic Factor Titles
1	Acceptance/Cohesion
2	Universality
3	Altruism
4	Installation of Hope
5	Guidance
6	Vicarious Learning
7	Self-understanding
8	Learning from Interpersonal Action
9	Self-disclosure
10	Catharsis
11	Corrective Recapitulation of the Primary Family
12	Existential Factors
13	Imparting of Information
14	Development of Social Skills

Diagnosis, Yes = Possession of a diagnosis of developmental disability was reported.

Diagnosis, No = Possession of a diagnosis of developmental disability was not reported.

Table 40

Count of Therapeutic Factors in Order of Greatest Total Incidence

GS	Factor	Total	Diagnosis		Leaders	Factor	Total	Diagnosis		Leaders
	#		Yes	No		#		Yes	No	
1	1	217	130	77	10	2	16	11	5	--
5	1	170	83	75	12	2	7	3	4	--
9	1	146	44	89	13	2	8	4	4	--
13	1	168	92	68	8	2	8	5	3	--
17	1	200	103	89	8	2	14	4	10	--
1	8	47	29	18	--	12	14	6	8	--
5	8	51	24	27	--	12	10	5	5	--
9	8	17	6	11	--	12	5	0	5	--
13	8	14	7	7	--	12	9	8	1	--
17	8	25	13	12	--	12	12	8	4	--
1	3	17	12	5	--	14	6	5	1	0
5	3	14	9	5	--	14	11	2	8	1
9	3	18	5	13	--	14	5	2	3	0
13	3	26	13	13	--	14	8	5	3	0
17	3	34	17	17	--	14	15	11	4	0
1	9	24	11	13	--	11	11	6	5	--
5	9	16	8	8	--	11	6	5	1	--
9	9	11	2	9	--	11	6	1	5	--
13	9	8	6	2	--	11	9	8	1	--
17	9	14	8	6	--	11	9	2	7	--
1	5	12	12	0	--	7	12	4	8	--
5	5	7	3	4	--	7	4	2	2	--
9	5	8	3	5	--	7	7	0	7	--
13	5	28	9	19	--	7	5	4	1	--
17	5	13	10	3	--	7	10	6	4	--
1	13	18	5	3	10	6	10	7	3	--
5	13	14	2	1	11	6	10	7	3	--
9	13	15	1	1	13	6	3	1	2	--
13	13	11	0	3	8	6	7	5	2	--
17	13	10	2	0	8	6	5	4	1	--
1	4	12	10	2	--	10	4	1	3	--
5	4	5	5	0	--	10	6	2	4	--
9	4	14	6	8	--	10	5	1	4	--
13	4	13	9	4	--	10	6	4	2	--
17	4	12	3	9	--	10	6	4	2	--

Note. GS = Group session number. Diagnosis = Subtotals of group members who have (Yes) and have not (No) reported possession of a diagnosis of developmental disability. The table is read in value-descending order from top to bottom in the left column first, and then from top to bottom in the right column.

Table 41

Means and Standard Deviations of Each Factor's Incidence in Order From Greatest Incidence to Least Incidence

Factor	Total Count		Diagnosis Reported				Leaders	
			Yes		No			
	M	SD	M	SD	M	SD	M	SD
1. Acceptance/ Cohesion	180.20	28.15	90.40	31.37	79.60	9.21	10.20	2.28
8. Learn. Interpers. Action	30.80	17.15	15.80	10.28	15.00	7.78	--	--
3. Altruism	21.8	8.14	11.20	4.49	10.60	5.37	--	--
9. Self-disclosure	14.60	6.07	7.00	3.32	7.60	4.04	--	--
5. Guidance	13.60	8.44	7.40	4.16	6.20	7.40	--	--
13. Impart. Info.	13.60	3.21	2.00	1.87	1.60	1.34	10.00	2.12
4. Installation of Hope	11.20	3.56	6.60	2.88	4.60	3.85	--	--
2. Universality	10.60	4.10	5.40	3.21	5.20	2.77	--	--
12. Existential Factors	10.00	3.39	5.40	3.29	4.60	2.51	--	--
14. Dev. Soc. Skills	9.00	4.06	5.00	3.67	3.80	2.59	0.20	0.45
11. Correct. Recap. of Prim. Fam.	8.20	2.17	4.40	2.88	3.80	2.68	--	--
7. Self-understanding	7.60	3.36	3.20	2.28	4.40	3.05	--	--
6. Vicarious Learning	7.00	3.08	4.80	2.49	2.20	0.84	--	--
10. Catharsis	5.40	0.89	2.40	1.52	3.00	1.00	--	--

attempt to further characterize the group content.

If Therapeutic Factor 1 (Cohesion/Acceptance) is removed of all incidences of the other thirteen factors, its total mean would be 16.80. The mean for subjects who reported possession of a diagnosis of developomental disability would be 9.8 and the mean for those who did not report possession of a diagnosis of developmental disability would be 7.00. The ranking for Acceptance/Cohesion, in the case of removing all incidences from it of the other thirteen factors, would be third after Learning From Interpersonal Action (Factor 8), and Altruism (Factor 3). All other rankings would remain as shown in Table 40 and Table 41.

Figure 34 shows a line graph comparison of the rank order of the mean incidences of the therapeutic factors for those who did and did not report possession of a diagnosis of developmental disability.

One very striking result of completing the count of the therapeutic factors is the finding that the group of people who reported possession of a diagnosis of developmental disability appear to have demonstrated more mean incidences of therapeutic factors than the group who did not report possessing such a diagnosis, (see Table 41 and Figure 34). Of fourteen therapeutic factors, the mean incidence for the diagnosed group is higher than the non-diagnosed group in the cases of eleven factors. The only

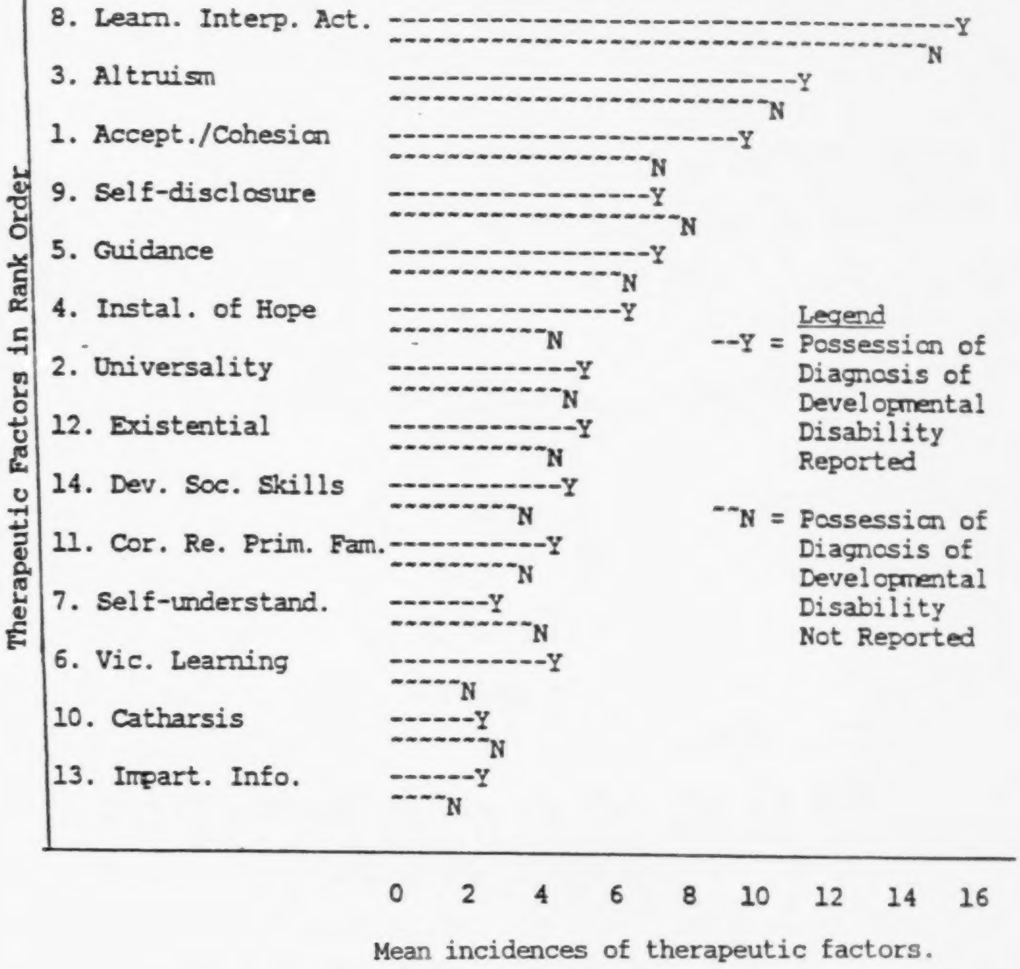


Figure 34. Rank order line graph of the mean incidences of therapeutic factors across all group sessions for those who did and did not report possession of a diagnosis of developmental disability.

Note. The effects of the other thirteen factors are removed from Acceptance/Cohesion. The therapists' incidences of the factors are removed from the figure.

factors in which there was more incidences observed in the non-diagnosed group were Self-disclosure, Self-understanding, and Catharsis.

Another interesting finding concerns the trends of the incidences of the therapeutic factors in the diagnosed or not diagnosed groups of people within the integrated group across the time span of the five evaluated group sessions.

Figures 35 to 48 (inclusive) describe graphically the relationships between the fourteen therapeutic factor counts for the different groups of participants. In each figure there are a total therapeutic factor count, a factor count for group members who did report possession of a diagnosis of developmental disability, a factor count for group members who did not report possession of a diagnosis of developmental disability, and a factor count for therapists (or leaders).

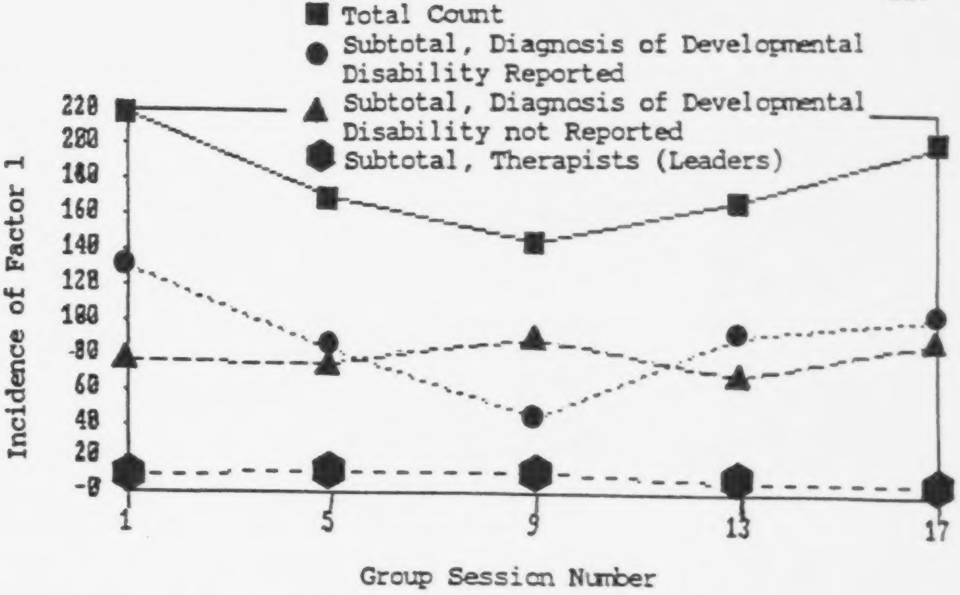


Figure 35. Count of Therapeutic Factor 1: Cohesion/Acceptance

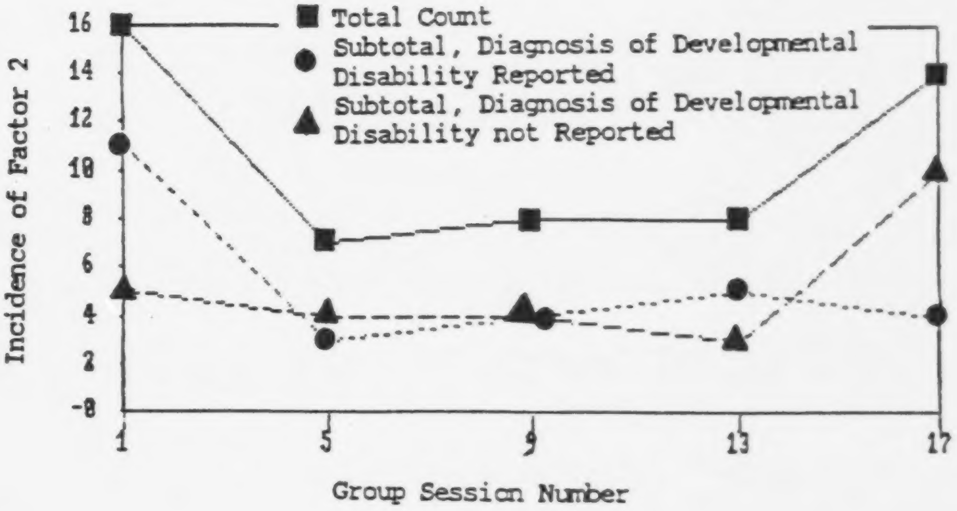


Figure 36. Count of Therapeutic Factor 2: Universality

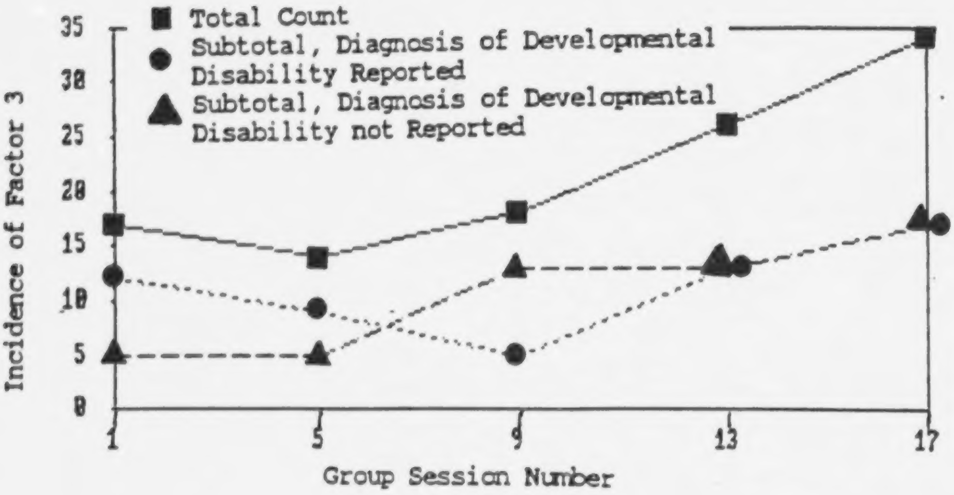


Figure 37. Count of Therapeutic Factor 3: Altruism

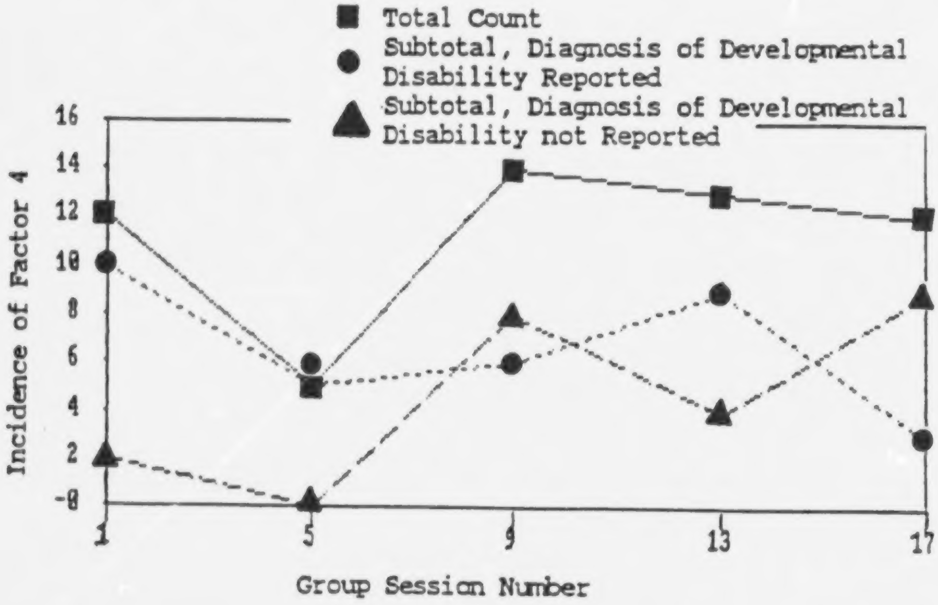


Figure 38. Count of Therapeutic Factor 4: Installation of Hope.

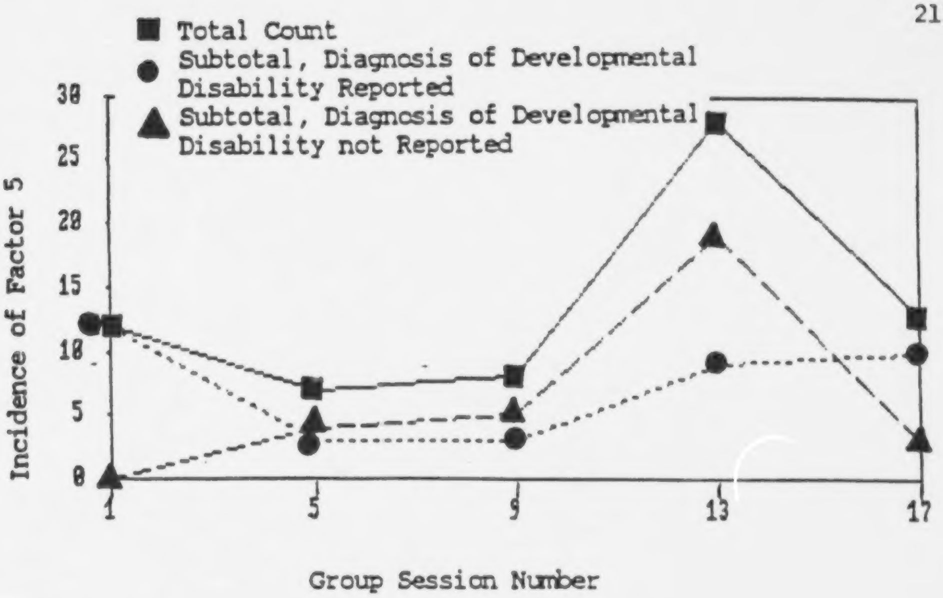


Figure 39. Count of Therapeutic Factor 5: Guidance

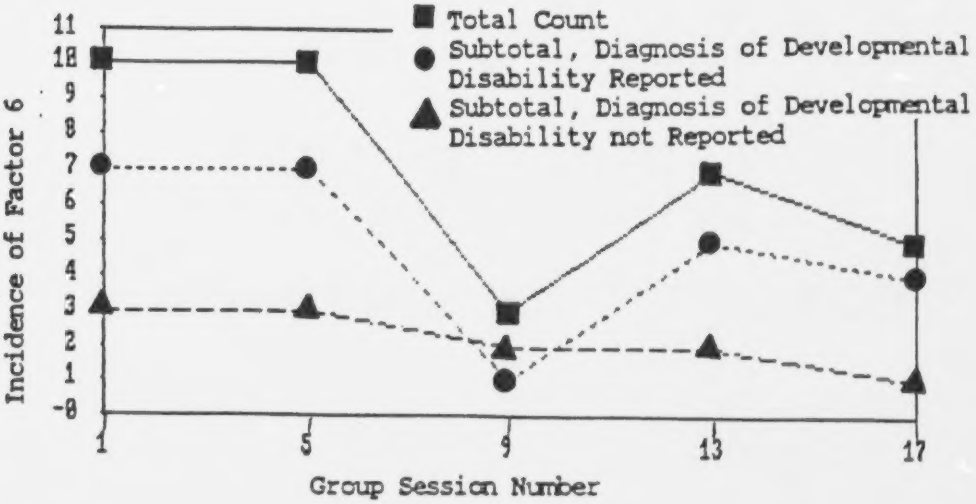


Figure 40. Count of Therapeutic Factor 6: Vicarious Learning.

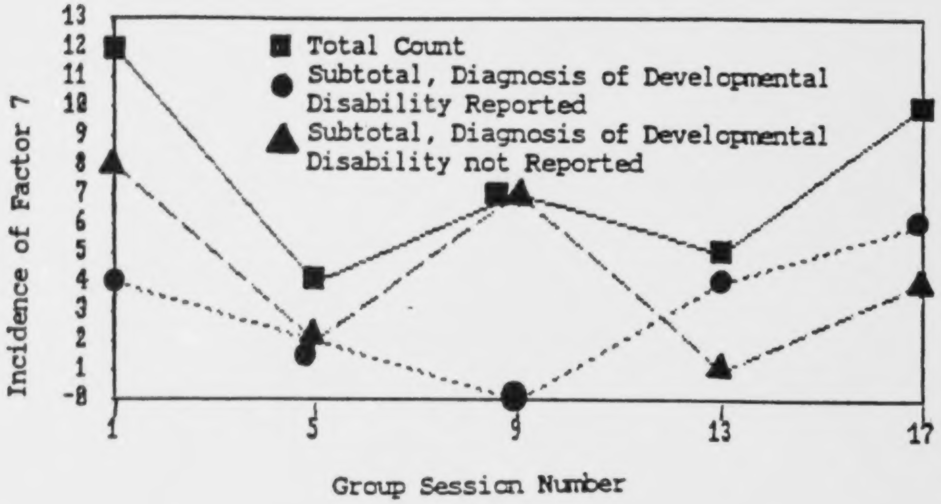


Figure 41. Count of Therapeutic Factor 7: Self-understanding

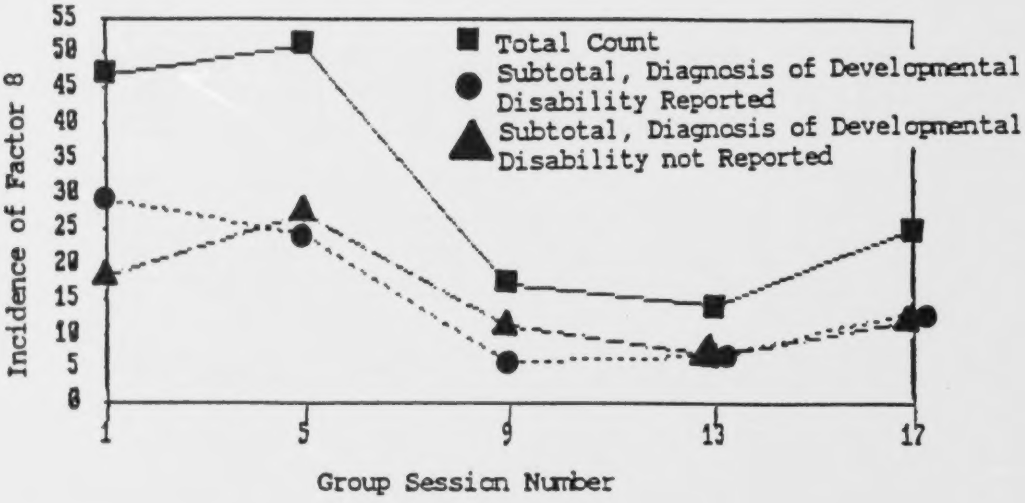


Figure 42. Count of Therapeutic Factor 8: Learning Through Interpersonal Action.

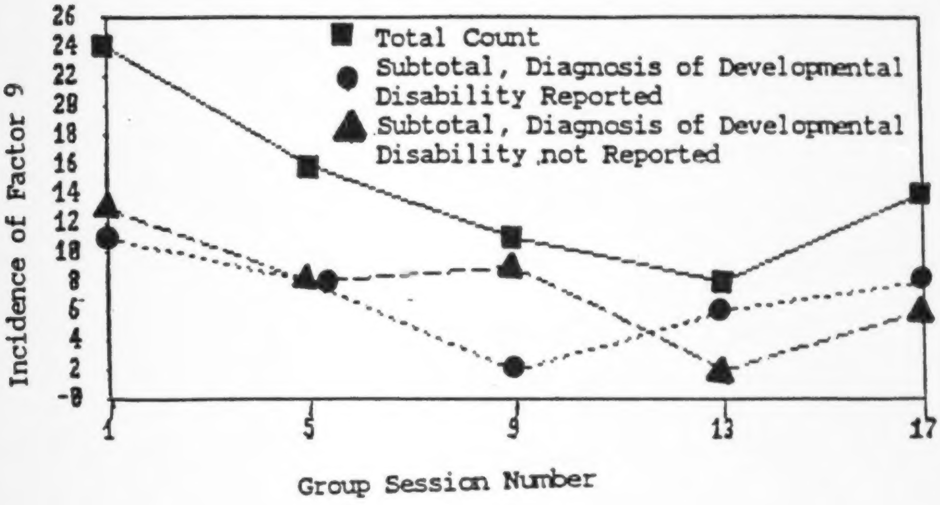


Figure 43. Count of Therapeutic Factor 9: Self-disclosure

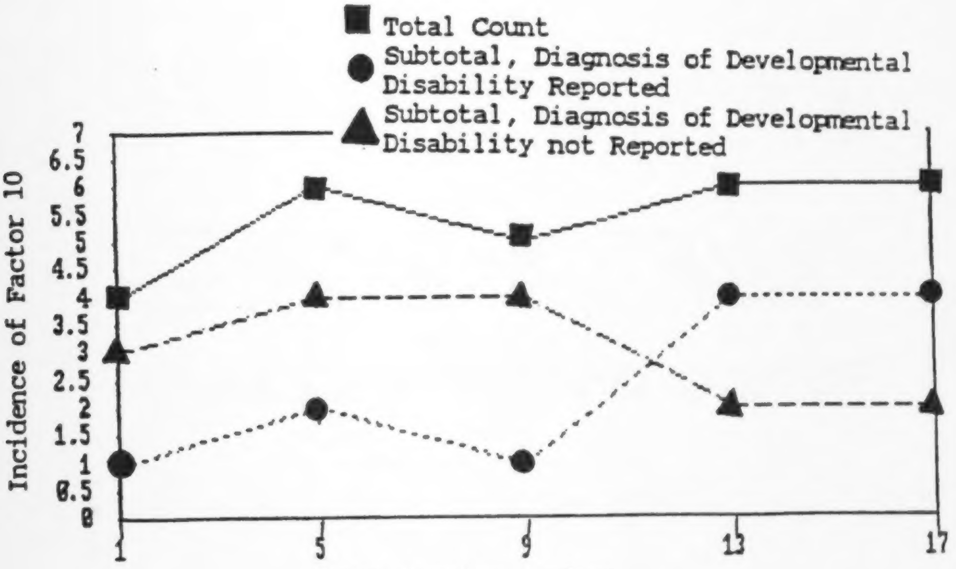


Figure 44. Count of Therapeutic Factor 10: Catharsis.

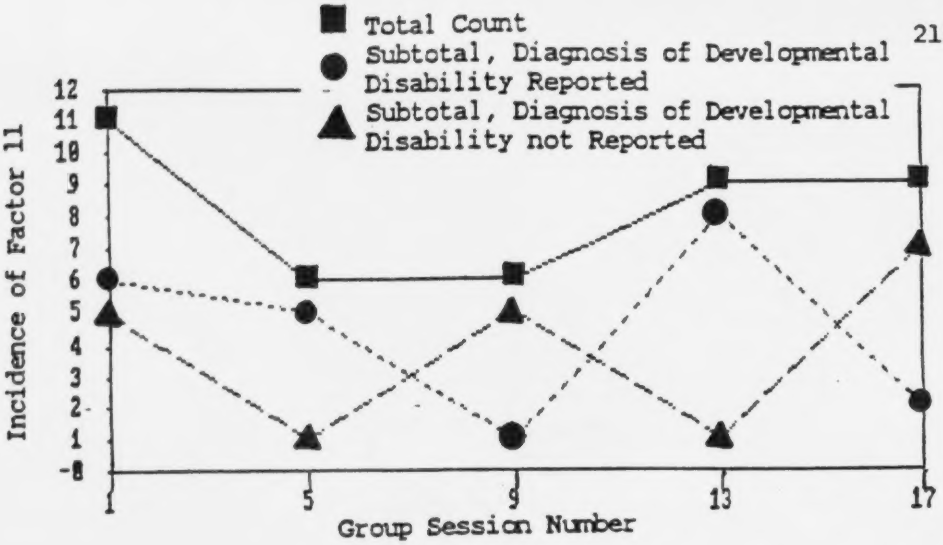


Figure 45. Count of Therapeutic Factor 11: Corrective Recapitulation of the Primary Family

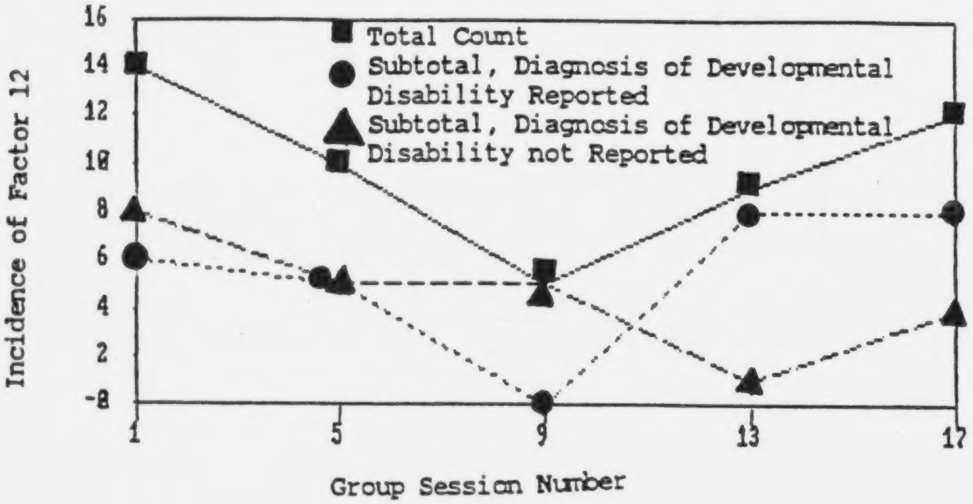


Figure 46. Count of Therapeutic Factor 12: Existential Factors.

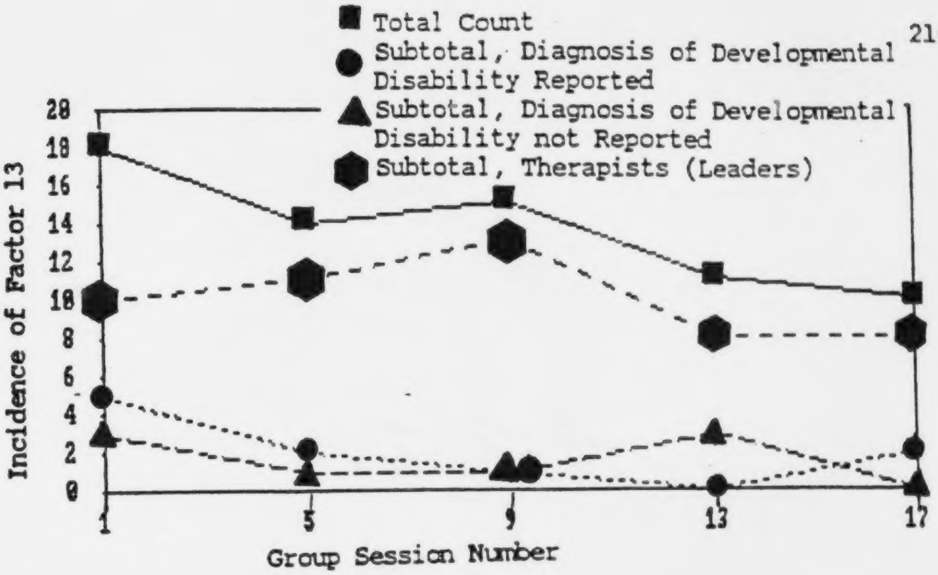


Figure 47. Count of Therapeutic Factor 13: Imparting of Information

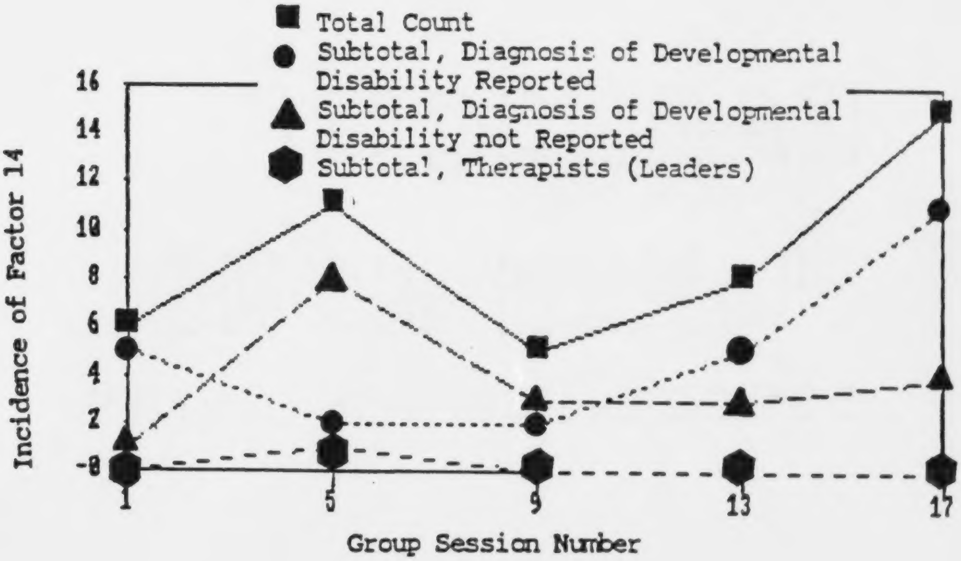


Figure 48. Count of Therapeutic Factor 14: Development of Social Skills.

Differences observed in Figure 35 to Figure 48 (inclusive) between the two groups separated by the possession or no possession of a diagnosis of developmental disability begin with the first group session evaluated. Note that for the following ten of fourteen therapeutic factors, the incidence of each factor is higher in session one for the group of members who did report possession of a diagnosis of developmental disability than those who did not report such a diagnosis: Acceptance/Cohesion, Universality, Altruism, Installation of Hope, Guidance, Vicarious Learning, Learning from Interpersonal Action, Corrective Recapitulation of the Primary Family, Imparting of Information, and Development of Social Skills.

In the second session evaluated (group session five), Acceptance/Cohesion, Altruism, Installation of Hope, Vicarious Learning, Corrective Recapitulation of the Primary Family, and Imparting of Information remain higher in the group who reported a diagnosis. However, Self-understanding, Self-disclosure, and Existential Factors have become essentially equal between the two integrated groups of people. In addition, the group of people who did not report a diagnosis of developmental disability were observed to have higher counts of Universality, Guidance, Learning from Interpersonal Action, Catharsis, and Development of Social

Skills than those who did report possession of a diagnosis. This change can be viewed in Figure 35 to Figure 48.

In group session nine (the third session evaluated in the data analyses), a complete reversal of the trends of therapeutic factor incidences in session one seems to have occurred. The group of people who did not report possession of a diagnosis of developmental disability were observed to have higher incidences of all therapeutic factors (with the exception of Universality and Imparting of Information which were essentially equal in incidence).

The fourth session evaluated (group session thirteen) shows a return to a similar trend of incidences of therapeutic factors as was found in the first session. Incidence counts of all factors were higher in the group of people who reported possession of a diagnosis of developmental disability with a few exceptions. Altruism and Learning from Interpersonal Action were observed to occur at a similar or near to equal rate in the two integrated groups. Guidance and Imparting of Information was observed to be higher in the non-diagnosed group than in the group which reported a diagnosis of developmental disability.

In the final group (group session seventeen) all incidence counts of therapeutic factors were again the highest for the group who reported possessing a diagnosis of developmental disability exept for Altruism (which was essentially equal), and Universality, Installation of Hope and Corrective Recapitulation of the Primary Family, all of which were higher in incidence for the group which reported no diagnosis.

Therapeutic Themes

The co-therapists recorded the following interpretations following a discussion after each group: the theme of the group, any affect expressed, the major defenses utilized, the major conflict(s), and a compromise or a resolution. The initial purpose of these recordings was to aid the therapists in conceptualizing the group processes and contents. This section of the post hoc exploration is simply a summary of the recordings of such interpretations for each of the seventeen groups. The intent of this section is to stimulate incentive for further investigation and/or practical use of theme interpretations - and to allow later possible comparisons with other of the study's findings.

Table 42 displays the interpretation recordings as described above for all of the seventeen groups.

Table 42

Group Themes, Affect, Defenses, Conflicts, Compromises and/or Resolutions

Session #	Theme	Affect	Defenses	Conflict	Compromise/ Resolution
1	not being supported by family, the 'system', work	sadness, caring, anger expressed as frustration	avoiding	wanting to be supported and connected versus being unsupported and unconnected	to support each other in the group
2	being involved in situations that are out of our control	anger, anxiety, frustration, some sadness	sleeping, denial	wanting to be in control versus not being in control	to continue next week
3	sharing feelings about physical abuse as a child and witnessing child abuse now	sadness, anger, frustration	ignoring	feeling ineffective versus wanting to be effective	to continue next week and to voice feelings
4	portraying oneself as capable and wanting to be acknowledged for that	fear, anxiety, frustration	denial, avoiding	wanting to act responsibly versus not wanting be responsible	practise fearful situations here in the group
5	not being able to express one's feelings directly to people	anxiety, fear, frustration	intellectualization	wanting to know how and when to directly express feelings versus fear of expression and negative consequences	practise within the group

(table continues)

Table 42

Group Themes, Affect, Defenses, Conflicts, Compromises and/or Resolutions

Session #	Theme	Affect	Defenses	Conflict	Compromise/ Resolution
6	feeling 'stuck' in a frustrating and unpleasant situation where there seems to be no solution	anger, caring, frustration	reaction formation	being 'stuck' versus wanting to be 'unstuck'	to come to group and at least continue 'feeling good' here through developing trust
7	being alone - growing up lonely	sadness, anger, frustration, fear	hypochondriases, intellectualization	wanting to trust and have friends versus hesitancy because of past experiences	to start talking about issues
8	struggling with being accepted in the group re: sharing feelings, attending group	warmth, frustration	displacement	is it safe to share and talk? versus holding it inside	accept each struggle and attempt at expression
9	being controlled by someone else and struggling for one's identity	caring, fear, anger, sadness, frustration	displacement	to assert oneself, take control, establish autonomy versus being rejected	to be here for one another and to return and talk in the next group
10	being rejected by family, loved ones	anger, sadness, confusion, loneliness, frustration	projection, acting out	being dependent versus being independent	extend the group to more sessions than are scheduled

(table continues)

Table 42

Group Themes, Affect, Defenses, Conflicts, Compromises and/or Resolutions

Session #	Theme	Affect	Defenses	Conflict	Compromise/ Resolution
11	being neglected and rejected by caretakers and significant others	sadness	acting out, regression, projection, avoidance	to talk about neglect/ rejection versus to not talk about it	to start to acknowledge feelings re: being neglected/ rejected
12	having been abused sexually, physically, emotionally	fear, sadness, anger, helplessness, degradation	denial, passive aggression, projection	wanting the abuse to stop versus not having the power to stop it	recognize the feelings associated with the abuse
13	'owning' one's feelings and acting on them in a mature, responsible way	fear, relief, anger, caring, tentativeness	avoidance, silence, passive aggression, displacement	wanting to act like a mature, responsible adult versus being afraid to let go of being helpless	to be responsible for speaking up for oneself in group
14	dealing with loss	sadness, anxiety, guilt	projection, avoiding, humour	wanting to deal with loss versus not being sure how	to talk, to live together, to give advice

(table continues)

Table 42

Group Themes, Affect, Defenses, Conflicts, Compromises and/or Resolutions

Session #	Theme	Affect	Defenses	Conflict	Compromise/ Resolution
15	loss	sadness, fear,	introjection, avoidance, repression, humour	to grow, be healthy and get on with life versus remaining unhealthy and to be taken care of	none
16	being taken advantage of	anger, hurt, anxiety, fear	avoiding, denial, controlling, exaggeration of affect	not wanting to be used versus not having anything better	wait until the next group
17	dealing with loss	caring, sadness, anxiety, happiness, celebration	denial, projection, avoidance, humour	having to say good-bye versus not wanting to say good-bye	acknowledgement of one's accomplishments and what one has yet to do

CHAPTER V

DISCUSSION

The discussion of the current study is divided into the following areas: Limitations, Implications, and Conclusions. The Limitations and Implications sections are further divided to include outcome results, process results and post hoc explorations. Each section which discusses implications includes suggestions for further research.

Limitations

The present study is not intended for experimental purposes. It is a pre-experimental, exploratory study.

Limitations are discussed in the following order: general limitations which apply to both outcome and process measures, limitations which are specific to the outcome testing devices. limitations specific to the process devices, and finally limitations which apply to the post hoc evaluations.

General Limitations

Three outcome measuring devices were utilized which sampled a variety of human areas: symptomatology, social adjustment, and target goals in therapy. The two process measuring devices utilized a variety of raters and sampled a broad area of group process. The variety of areas sampled and raters utilized was an attempt to alleviate difficulties present in self-report and observer infered evaluatory devices outlined by Beulter and Hamblin (1986). These difficulties are: the halo effect, bias toward leniency or severity, central tendency responses, and position or proximity biases.

Although attempts were made to alleviate the problems associated with self report and observer based evaluatory devices, it cannot be said that the difficulties outlined were irradicated.

Mediating and uncontrolled variables may have affected the outcome and process measurements. Medications, although most were reported to have remained stable throughout the course of therapy, may have augmented the treatment effects as an uncontrolled variable. In addition, one subject reported medication changes - although they were not predicted at the commencement of the therapy.

The section of this study which outlined the demographic characteristics reviews some variables which could have had mediating effects upon the outcome and process device results: changing emotional relationships with significant others and job changes - some of which were not reflected in the SAS-SR results. An example of a social change that was not included in the SAS-SR results was the case of a subject who left a common law relationship during the treatment, and then returned to the same relationship before the end of the group therapy.

Other mediating variables occurred during the course of therapy which may have attenuated or augmented the outcome results. One subject suffered a sprained ankle. Another group member enjoyed a surprise visit from long-time friends on one weekend. In both cases the group members missed one group session.

Mediating variables which could have affected the results of the study also include the differences in the demographic characteristics reported in Table 1. For example, the ratio of males to females was not equal for each of the two integrated groups of people. Some people had physical involvements like cerebral palsy. Some had children not living with them and some had never had children. Some were involved in spousal relationships and some were not.

Also, unknown, mediating variables could have been operating in the case of the group member who stopped coming to the group sessions shortly before the end of the therapy and who did complete the posttesting. The therapists had some idea of why this member wished to end contact with the group because they were told of some of them: a desire for more individual attention from therapists and difficulty in dealing with group conflict.

However, there seemed to be other variables at work which were not shared by the group member with the group or the therapists.

In the case of some of the mediating variables, there were hints at the effects and the composition of the variables. However, because there were quite a few mediating variables which were only hinted at, one cannot eliminate the possibility that there were more, completely unknown similar types of mediating variables at work.

There was no control group, and therefore no control of any independent variable (the treatment, groupings of members into those who did and did not report possession of a diagnosis of developmental disability, and further groupings of group members and raters). In addition there was no control for the variable of intention or the placebo effect. One cannot be sure exactly what caused the therapeutic processes observed.

Because the sample was so small, representativeness cannot be claimed. Outcome devices analyzed the observations collected from nine subjects. Process devices analysed observations of the integrated group from groupings of raters which ranged in number from two (in the case of the GCQ rating of the therapists, and the HIM-G ratings) to ten (in the case of the GCQ where all raters' evaluations were considered).

Different effects also may have come into play which had to do with the adequacy of the dependent variables, the measurement devices themselves. Most devices were designed to be pen and pencil tests. Only the BSI was intended by the test's author to be conducted with people who had difficulty completing the device in pen and pencil form. Derogatis' (1982) modifications had to do with people who had physical limitations. All testing devices were completed with pen or pencil by the group members in the present study, but those who had difficulty reading had the questions read to them. The procedure is outlined in the section of the present study entitled 'Recording Procedures'. The practice of modifying the testing devices in a way not originated by the test authors may have affected the tests' validities.

A confounding factor present in the current study was the training of the therapists. Ideally, therapists experienced in the model utilized should be used within the treatment in order to retain a constant method. In the case of the present study the co-therapists were not experienced within the Interactional-behavioral model (Tomasulo, 1992). The co-therapists had never conducted a group according to the Interactional-behavioral model before the current study. They relied upon written material and a videotape package of the model (Tomasulo, 1992) with which to learn from and study - as well as their own experience, the supervision of Dr. G. K. and a supervisory visit from Dr. Shen.

Lastly, one must be aware of the possibility of achieving results similar to the reults found herein by chance simply because of the high number of examinations undertaken in this exploratory study. It should be assumed that the total error rate of the study is high due to the additivity of the per experiment error rate.

Specific Outcome Analyses Limitations

Two of the outcome measures are used in a one group pretest-posttest design (the BSI and the SAS-SR). The Target Goals measurement is only one observation better than the one group design cited above. As Campbell and Stanley (1963) assert, the design is limited because of confounded extraneous variables that may jeopardize validity such as history; maturation; testing; instrumentation; interaction of selection, maturation and other variables; interaction of testing and the treatment; and interaction of selection and the treatment. Also regression and reactive arrangements are questionable.

Limitations related to the measurement devices of the outcome analyses are applicable. Derogatis (1982) reports some reductions in reliability of the BSI because of the shortening of the BSI from the SCL-90-R; although he states that convergent relationship patterns between the two scales were retained. Derogatis also suggested that people with developmental disabilities should not be administered the BSI. Although the author of the present study challenged Derogatis' reasoning behind such a prohibition with empirical backing, the fact remains that the test was used for a population of people which the test author specifically excluded.

The SAS-SR was originally intended by the author to assess social adjustment in depressed patients who might be sensitive to treatment which specifically included psychopharmacologic intervention (Weissman & Bothwell, 1976). Psychopharmacologic treatment was not part of the present study. Therefore the mismatch of intended treatments in the originating study of the test and in the present study may negatively affect the measurement device's validity to the present study's subject population. In addition, Weissman, Prusoff, Thompson, Harding & Myers (1978) note that severely impaired subjects who assume a role (according to the SAS-SR) after a period of rehabilitiation could appear to have deteriorated according to the scale due to an artifact of the SAS-SR which has to do with nonparticipation in roles upon initial assessment. This artifact may have affected the results of the SAS-SR in the current study because there were incidents where people in the integrated group assumed new roles (according to the SAS-SR) during therapy.

The Target Goals assessment device was modified by the present author to include a mid-therapy goal achievement evaluation by the subjects which was not part of the original rating device authored by MacKenzie (1990). This may have affected the test validity and reliability.

Specific Process Analyses Limitations

Regarding the process measures, the following threats to validity could be present: history, maturation, statistical regression, interaction factors of selection, maturation and other variables; interaction of testing and the treatment; and interaction of selection and the treatment, and possibly reactive effects of experimental arrangements.

No complete interactional analyses, such as content analyses included in the HIM, the Bales content analyses, or the Structural Analysis of Social Behavior (SASB) by Lorna Benjamin Smith were conducted upon the process data. This elimination may have added to the possibility that valuable process information was lost. Also the group sessions evaluated by the GCQ and the HIM-G were only the first, fifth, ninth, thirteenth, and seventeeth sessions. Much valuable data may have been lost through eliminating the group sessions which were conducted between the evaluated sessions.

A very limiting factor in the evaluation of the HIM-G is the fact that two of the three hypotheses related to the process device utilized nonstatistical analyses because only two raters observed the groups scheduled for evaluation.

The HIM-G has been subject to critical evaluations. For example Powell (1977) examined the degree to which HIM-G matrix cells were correlated. Powell reports finding that regardless of which correlation method is utilized, the table of specifications does not hold up. W. F. Hill (1977) suggests that the validity of the HIM rests upon its utility, and he cites many studies which use the HIM in his 1977 publication. Incidentally, additions to this bibliography are ongoing (W. F. Hill, personal communication, June 17, 1993).

The use of the reference data in the place of norms may be questionable. For one thing, there are no norms or reference data for the HIM-G, so the HIM reference data are utilized regarding Pfeiffer, William and Heslin's (1973) assertion that the HIM reference data may be used with the HIM-G due to the HIM-G correlating with the HIM scores over .90.

The reference data are utilized in the place of actual normative data because psychometric normative data do not exist.

The reference data are based upon a sample of fifty group protocols which were all evaluated by P. Hill (1964). The data are described as diverse, but not random because the most of the therapists from whom the protocols were acquired were known to Hill (Hill, P., 1964). In addition, the reference data are not current, but originate from groups conducted thirty years ago or more. None of the reference data protocol descriptions seem to completely match the composition of the current study's group.

The inter-rater reliabilities of the process devices is also a limiting factor in the current study. First, it was found that all inter-rater reliability measures improved over time, as the group sessions progressed. This finding may have been affected by the co-therapists' lack of familiarity with the Interactive-behavioral model or other unstated variables. In addition the Total Percent Agreement (T%) inter-rater reliability indice was found to be much weaker than the T% within one rating for both the GCQ and the HIM-G, indicating that greater inter-rater reliability was found for broader, rather than narrower evaluations. Inter-rater reliabilities found for different groupings of raters varied. Inter-rater reliabilities found for the group leaders' and outside observers' evaluations of the GCQ and the HIM-G evaluations by outside observers increased in strength towards the middle sessions, and decreased in strength towards the end of the sessions. The group member raters' inter-rater reliabilities of the GCQ increased over time.

Specific Post Hoc Exploration Limitations

The limitations associated with the post hoc explorations of the count of therapeutic factors and the therapeutic themes are most definitely to do with the subjectiveness of the evaluations. Both post hoc explorations were conducted by the author who was a therapist. In the case of the therapeutic themes exploration, both the author and the other therapist completed the interpretations.

The halo effect, tendencies toward leniency, and position or proximity biases may have affected the results of the two post hoc evaluations. Therapeutic and philosophical principles accepted and rejected by the two co-therapists, personal biases, and countertransferences may have affected the interpretations of both the therapeutic factor counts and the recordings of group themes, defenses, affectations, conflicts, and compromises or resolutions.

Implications

Because the purpose of the current study is exploration, implications are related to results suggested by the study's very limited findings. It is hoped that the implications outlined will convince the reader that further explorations into integrated group therapy are worthy.

Following are implications related to: outcome analyses, process analyses, and therapeutic efficacy analyses (in respective order).

Specific Outcome Analyses Implications

For any of the three outcome devices (the BSI, the SAS-SR and the Target Goals) the findings of the current study suggest that whether or not a group member had been given a label of developmental disability did not affect how they answered the outcome tests.

Evidence of significant positive change was found in two out of three outcome measuring devices.

Significant positive change was found within the BSI results for all group members. The results of this analysis suggested that positive change was demonstrated when eight out of twelve indicators were found to significantly lower in posttesting than the Psychiatric Outpatient Norms (Derogatis, 1982). Only one indicator was found to be significantly lower than the norms in pretesting. A repeated measures two-way Anova demonstrated significant differences in score means between pretesting and posttesting for the following scores (the first three of which are global scores): the General Severity Index, the Positive Symptom

Total, the Positive Symptom Distress Index, and Paranoid Ideation. Two global scores were found to be both lower than the Psychiatric Outpatient Norms in posttesting and to be significantly different in posttesting than in pretesting: the General Severity Index and the Positive Symptom Distress Index.

Significant positive change was also found in the Target Goals analyses where group members periodically rated their achievements in their interpersonal goals which they set themselves. The results suggested that significant change was seen in the comparison of the Expectations score mean and the Achievement score mean at the end of therapy. The graphical portrayal of the means indicates that the trend was an upward one, suggesting that the subjects' final evaluations of their achievements of their interpersonal goals in therapy exceeded their expectations.

The SAS-SR data analyses indicated that no significant differences were found between pretesting and posttesting in social adjustment, suggesting that neither positive nor negative change was evident.

Suggested Further Research

Implications regarding the outcome analyses for future research consist of narrowing the focus of future outcome studies, making the study more experimentally sound, and making the devices utilized more applicable to the subjects who use them.

The current study was an exploratory one which attempted to cover as much 'ground' as possible. In hindsight, it can be seen that this was an overly ambitious goal. The outcome analyses section of the current study, if done in a scientfically experimental or pre-experimental manner, would be a very large undertaking in and of itself.

The pre-experimental design of the current study leaves much to be desired, and placed severe limitations upon the results due to threats to internal validity which were uncontrolled. A more rigourous pre-experimental or experimental outcome design that the current one is recommended for future studies.

A control group which utilizes a neutral treatment method as well as comparison groups consisting of different treatment models might shed more light on the adequacy of the treatment model. In addition control groups and comparisons which control for the independent variable of whether or not a subject reports possession of a diagnosis of developmental disability should be established. Groups of differing member populations could be compared: those who have a diagnosis of developmental disability, those who do not, and integrated groups composed of the two populations.

If the Target Goals and/or the SAS-SR devices are used in future studies, it is recommended that the scientists utilize input from the group therapists for the Target Goals and from therapists and significant others in the group members' lives for the SAS-SR. All of these variations are possible, say the authors of the two devices (MacKenzie, 1990; Weissman & Bothwell, 1976). Information from these additional sources was not included in the present study due to time restraints because of the expansiveness of the information sampled in both the outcome and process evaluations combined. The use of the additional sources of information for the SAS-SR and the Target Goals would enable a future study to further reduce the difficulties present in self-report devices (which have already been outlined with reference to Beutler and Hamblin, 1986). Outcome assessment devices which utilize input only from observers or interviewers or only from significant others in combination with self-report measures may also help to alleviate the problems inherent with the use of only self-report devices.

It is recommended that if a similar study to the current one is attempted in the future and the same outcome devices are employed, that psychopharmacologic treatment be a part of the intervention, or an outcome device other than the SAS-SR be utilized. Another device may be used if drug treatment is not a necessary part of the intervention.

If outcome evaluation devices cannot be found which are more suited to the population studied, perhaps they need to be created. The establishment of norms applicable to an integrated group (or two sets of norms) for the outcome devices utilized within the present study may allow for more appropriate comparisons as well.

Therapists should be well versed and experienced in all of the treatment models utilized in any future studies, so as to alleviate the confounding variable of therapist training (or lack thereof), which was present and acting in the current study.

More control of medication variables, or at least a more stringent monitoring of medications - would alleviate a variable which was uncontrolled in the present study. Perhaps accurate information could be required of prescribing physicians before a prospective group member could join the group.

Analyses of demographic changes over the course of therapy may alleviate difficulties experienced in the current study. These difficulties had to do with changes occurring which were not analysed by any measuring devices in an overt manner. A more stringent control of all possible variables may help a future study, although is is not possible to have control over all mediating variables.

Many of the suggestions put forth herein for future outcome studies of integrated group therapy are changes which may take a long time: creation of appropriate tests or at least the establishment of appropriate norms, integration of psychopharmacologic and group psychotherapeutic treatments if the SAS-SR is used, random selection of results from a large pool of findings, more variety in the type of information sampled and the origins of information, more therapist training and experience in the use of the treatment models utilized, and the use of control and comparison groups.

Specific Process Analyses Implications

In order to discuss the results of the process analyses of the current study with regard to whether or not positive change was found, comparisons between the findings of the present study and findings of past group studies as well as with accepted group therapy stage theories is offered.

Group Climate Questionnaire (GCQ)

The analyses of the process data indicate that change over time indeed did occur within the integrated group therapy sessions. Evidence of significant change over time was found for all three GCQ scores (Engaged, Conflict and Avoiding).

In addition to evidence of simple change occurring over time, specific trends of change were found which can be used to characterize the group processes and content. Trend analyses indicated that significant linear trends were evident in the GCQ Engaged scores for the rater groupings of group members (n = 6) and therapists with outside observers (n = 4). In addition, a significant quadratic trend was found for the rater grouping of therapists with outside observers. Therefore, it can be concluded that the perceived trends in the Engaged scores were different for the group members and the therapists with the outside observers. The graphical portrayals of the Engaged scores indicate that the trends were probably in an upward direction, indicating an increase in Engaged scores over time.

Significant linear trends were also found for the GCQ Conflict scores regarding the main effect of time. The graphical portrayals of the Conflict scores suggest that the trends were directed downwards - indicating a decrease in Conflict scores over time.

GCQ Avoiding scores seem to have decreased over time if one views the scores means visually in a graphical portrayal, but statistical significance did not confirm these appearances.

Although this author could find no norms for the GCQ, a comparison is made between a study done by MacKenzie, Dies, Coché, Rutan, and Stone (1987) and the current study's results. Some similarity in the resulting GCQ scores of the two studies is noted.

MacKenzie et al. (1987) defined their interpretation of 'successful groups' through having evaluated fifty-three two-day training groups with both outcome and process measures. The groups are said by MacKenzie et al. to generally have consisted of no more than twelve members, and to have met in four sessions of about three and one half hours each over the two days. The GCQ was evaluated by 555 members at the first group session, 549 at the second session, 535 at the third session, and 525 at the last session. There were 28 specific interest groups and 26 general psychodynamic process groups. MacKenzie et al. report that the general groups were composed of "...four groups for graduate students and residents, three groups for advanced therapists, and one group for instructor-designates" (1987, p. 56).

The outcome measure employed by MacKenzie et al. (1987) was the Global Outcome Form, which the authors state has evolved over several years and was based upon the usual American Group Psychotherapy Association (AGPA) Institute Evaluation Form. The form asked participants to rate the leader and the group on seven-point evaluation scales which range from 'outstanding' to 'very poor'. The participants also evaluated the amount that they learned form the group experience on a four-point scale. The Global Outcome Form was used to evaluate the success of each group by calculating a composite score through assigning equal weight to the following items: "overall satisfaction with the leader", "overall satisfaction with the group", and "learning in the group" (MacKenzie et al., 1987, p. 58). Substantial correlations were found.

The groupings for which significant linear trends were found in the present study for the score of Engaged, followed the rising trend of Engeged scores which MacKenzie et al. (1987) describe. The general trend in the present study over time begins with a mean Engaged score of just below four and rises to a final mean score of just below five.

The Engaged mean T standard score reported by MacKenzie et al. (1987) for the most successful groups was 55.5, and the mean for the least successful groups was 44.3. In the present study, the mean score, expressed in the standardized scoring utilized by MacKenzie et al in their study was 54.23.

The relatively high Engagement scores in the first session are conducive to MacKenzie and Livesley's (1983) description of the first stage in the theory of group development which involves strong Engagement scores in the beginning sessions. This phenomenon delineates the resolution of the task of engagement and the emerging of the group as a social system with a group identity.

MacKenzie et al. (1987) state that the mean Conflict T score for their most successful groups was 46.8 and the mean T score for the least successful groups was 53.0. The mean Conflict T score for the present study was 48.70.

MacKenzie et al. (1987) report that the mean Avoiding T score for their most successful groups was 46.8 and for the least successful groups the Avoiding T score was 55.6. The same mean T score for the present study was 51.84.

Even though comparisons between GCQ scores of the integrated group of the present study and the groups conducted in the AGPA Institute may not be quite valid because of the composition of the subject populations, types of raters, and the types of groups; the similarities in the score patterns and means as they relate to the successful group definitions MacKenzie et al. (1987) are notable.

Hill Interaction Matrix - Group Form (HIM-G)

Regarding the HIM-G scores, if one is accepting of Hill's general idea that positive change in groups is indicated by movement from Pre-work to Work, and from Non-Member-Centred interaction to Member-Centred interactions, (Hill, 1965), and that positive change is also evidenced by HIM-G categories which entail increased personal risk in therapy, one might conclude that positive change was evidenced within the integrated group therapy sessions over time.

Pre-Work scores and the orienting stage of Quadrant 1 decreased over time, indicating that other processes were more popular in the later sessions.

The safe Speculative Work score fluctuated over time and eventually decreased. The more risky Confrontive Work score remained relatively stable and high, and slightly increased in the later sessions. The Therapist Activity score also remained stable at a high percentile level over the course of the group sessions. Both the Confrontive and Therapist Activity scores were the only HIM-G scores to be found to be significantly higher than the reference data.

There are many possibilities which could explain the trends regarding the Confrontive and Therapist Activity scores. For example the nature of the intervention model utilized is characterized by much therapist participation in psychodrama and the specific adaptations of the Interactive-behavioral model. The co-therapists have expressed that they come from a training base in group psychotherapy which emphasizes confrontation. However these suggestions have not been studied within this paper.

The Quadrant 4 score increased over time, indicating increased group production with a peak in the middle session which was evaluated.

As hypothesized, the Risk Ratio increased over time, as did the Intra-group Ratio. These findings indicated (respectfully): increased participation in Assertive and Confrontive (risk categories) compared to in Speculative and Conventional (safer categories), and increased participation in the internal categories (Group and Relationship) compared to the external categories (Topic and Personal). The Risk Ratio, however, was observed to decrease dramatically at the last session, where people were saying 'Good-bye', as most group members likely did not wish to challenge or to be challenged. This is the point where the Assertive score was observed to decrease.

Perhaps if one views the seeming trends of Quadrant Two (which was explored in a post hoc manner) with those of Relationship (IV), and Group (II), one can characterize what appears to have occurred with Quadrant Two. The reversing of trend in Quadrant 2 scores with Group scores and Relationship scores could indicate a time in the middle of the group sessions where the focus of the group interaction shifted from a Pre-Work orientation of searching for the self or one's identity to a concentration upon group and relationship interactions, and upon productive group work of the highest HIM-G value category. Once this process was completed, another search seems to have commenced.

In considering some of the outstanding characteristics of the integrated group regarding the HIM-G analyses, one can compare these characteristics to those which are cited by W. F. Hill (1965) to be evident of a theory of group development in HIM terms and to certain therapy styles of interaction (although the research of interaction styles is dated).

W. F. Hill (1965) states that in non-directive, psychoanalytic and group analytic groups there is a place for low level interaction (Topic, I and Conventional, B). In the current group study these two scores decreased over time, but were evident in the therapy sessions analyzed. W. F. Hill also reported that in all of the three types of groups the Personal (III) category is an initial "natural" (W. F. Hill, 1965, p. 85) style of interaction, but in later sessions as members interact, Relationship (IV) categories become more dominant. This trend was certainly found in the current integrated group as the Relationship category increased, the Personal one decreased.

W. F. Hill (1965) asserts that a predominance of interaction in the Relationship category, the Group category, as well as in the Confrontive category are characteristics of the Group Analytic type of group interaction. In the current integrated group both Relationship, Group, and Confrontative categories were preponderant. Interestingly, the co-therapists of the current study reported the sharing of a psycho-analytic basis in group therapy training (see Appendix L).

Suggested Further Research

Some suggestions for futher research regarding the process analyses of an integrated group are the same as those recommended for the outcome analyses: a more rigorous pre-experimental or experimental design, the use of control groups to control for both treatments and differing group member populations as well as raters, the introduction of randomness in sampling observations, the creation of directly applicable rating devices or the norming of current ones to the populations examined, better therapist training in the therapy models utilized, more control or monitoring of medications, and an attempt to control for possible mediating variables.

In addition to improvements for future research which are common to both process and outcome analyses, there are suggestions which are specific to process examinations. Because no reference data are available which is directly applicable to the HIM-G, perhaps the use of the more complex HIM (to which the reference data is directly applicable) would be more logical. In addition, the use of more complete interactional analyses such as the HIM, the Bales content analyses (1951) or the SASB (Structural Analysis of Social Behavior, Benjamin, 1984), would provide more detailed analyses of group content and interactions.

The use of more current norms or reference data would be an enhancing factor rather than the HIM reference data of thirty years ago. P. S. Hill (personal communication, April, 1993) has stated that work has begun in this area.

The use of the HIM-G, however, proved to be successful in the current study. It seemed to be easy for the raters to complete and did not involve a lengthy training period. The content analyses scales mentioned above would involve much more rater training. Perhaps the development of norms applicable to the HIM-G would be more expedient for the clinician who conducts research within their own groups.

The use of the GCQ proved to be quite successful in the current study. All raters were able to understand it and to complete it. It is recommended that if this scale is used in future research that a more detailed analysis of its results be completed. For example, the movement of the group's ratings of each specific question may provide additional insight into the group processes.

The establishment of more stable inter-rater reliabilities would enhance the findings of future studies. Perhaps more groups should be viewed and rated until a more stable reliability between raters can be established before the research groups are evaluated. This end could be accomplished through the availability of video-tapes of groups which are more similar to the ones which are to be evaluated later than the audio-tape and video-tape used in the current study. Since the acquisition of taped groups for research is quite sparse due to consent agreements, it may be the researcher's responsibility to compile them.

Controlling for the therapists' theoretical leanings with regard to group therapy may lead to interesting results in future studies. The results could be compared to past studies which employed similar controls.

Implications for Clinical Practice and Counsellor Preparation

A summary of the evaluation which the co-therapists completed together after the integrated group sessions were finished is included in Appendix L. Suggestions were made by the co-therapists regarding clinical practice and counsellor preparation. One suggestion which was forthcoming from the evaluation summary was regular co-therapist meetings in which to discuss the ongoing co-therapy relationship and the use of the therapeutic model. Also the regular viewing of video-tapes of the groups to enhance self-evaluation as co-therapists and to give greater insight into the group processes and content was recommended. The co-therapists said that they felt that such insight cannot be acquired when one is involved in the active group only. The co-therapists also recommended that a more active and extensive schedule of professional observers and opportunities for regular feedback from these professionals would have enhanced their therapeutic effectiveness in the group.

Many of the concerns voiced by the co-therapists were, in hindsight, products of their unfamiliarity with the therapeutic model, and could have been ameliorated with greater experience and practice.

The number of members (nine) within the integrated group seemed to be a workable number, considering that there were two therapists. This number seemed to allow much variety of activities and processes within the Interactional-behavioral model (Tomasulo, 1992).

The fact that one therapist was female and the other male seemed to give ample opportunity for therapeutic transference. One therapist (the author) had quite a lot of experience in work with special populations (including those diagnosed with a developmental disability) and some limited exposure to group therapy. The other therapist (C. H.) was well versed in group therapy. The combination of the two types of experience seemed to enhance the co-therapy relationship. The co-therapists had worked together as a teacher and therapist at a group therapy program for troubled youth and their families for three years prior to working together in the integrated group. They were quite familiar with many of each others' strengths and weaknesses; and had already established themselves as co-workers. This familiarity may have done much in the creation of a workable co-therapy relationship.

Of course all of the suggestions made herein regarding the success of the co-therapy relationship and the workability of the number of members in the group are subjective. The suggestions should be tested experimentally if any real claims are to be made regarding their effectiveness in an integrated group program.

Specific Therapeutic Efficacy Analyses Implications

The implications applicable to the two post hoc explorations examined under the title 'Therapeutic Efficacy' in the current study are severely limited by their subjective natures. The subjectivity is limited to the interpretations of the author in the case of the Therapeutic Factor Count, and to the interpretations of the co-therapists in the Therapeutic Themes section.

Therapeutic Factor Count

The Therapeutic Factor Count revealed two interesting suggestions: a) the group of people in the integrated group sessions who had reported possession of a diagnosis of developmental disability were counted by the author to have displayed more mean incidences in eleven of the fourteen therapeutic factors counted, and b) concentrations of the counted therapeutic factors in the two integrated populations of people fluctuated from those who did and did not report a diagnosis of developmental disability across group sessions in time.

The only therapeutic factors for which more mean incidences occurred for the group of people who did not report a diagnosis of developmental disability were Self-disclosure, Self-understanding, and Catharsis. Incidences of Acceptance/Cohesion, Universality, Altruism, Installation of Hope, Guidance, Vicarious Learning, Learning from Interpersonal Action, Corrective Recapitulation of the Primary Family, Imparting of Information and Development of Social skills were all counted as occurring more often in the first session for the group of people who reported possession of a diagnosis of developmental disability than for those who did not make such a report.

In the fifth session the distribution of highest incidences of therapeutic factors between the two groups of people was changed. Six factors (Acceptance/Cohesion, Altruism, Installation of Hope, Vicarious Learning, corrective Recapitulation of the Primary Family and Imparting of information) were found to have the highest incidence counts within the group of people who reported possession a diagnosis of developmental disability. Five factors (Universality, Guidance, Learning from Interpersonal Action, Catharsis, and Development of Social Skills) were counted as occurring more often in the group who did not report possession of a diagnosis of developmental disability. Three factors (Self-understanding, Self-disclosure, and Existential Factors) were interpreted to have counts which were approximately equal between the two groups.

In the ninth session the concentration the highest incidences of most therapeutic factors was counted to be within the group of people who did not report a diagnosis of developmental disability with the exception of two factors deemed to be essentially equal between the two groups of people (Universality and Imparting of Information). The thirteenth session seemed to repeat the trend evidenced within the count of the first session except that

Altruism and Learning from Interpersonal Action were deemed to be distributed equally between the two groups of people, and Guidance and Imparting of Information were observed to have the highest count for the people who did not report possession of a diagnosis of developmental disability. The last session seemed to again repeat the trend of session one with the exception of Altruism (which appeared equally distributed) and Universality, Installation of Hope and Corrective Recapitulation of the Primary Family which were observed to have higher occurrences within the group who did not report possession of a diagnosis of developmental disability.

This author has selected six therapeutic factors which may be more reflective of interpersonal learning than the others. Five of the factors seem to be components of either internal or external expressions of interpersonal learning: Learning From Interpersonal Action. Catharsis, Self-disclosure, Development of Social Skills and Self-understanding. One selected factor is necessary to be present for any benefit or learning to occur for a group (Cohesion/Acceptance, with the effects of all of the other therapeutic factors removed). The selection of these factors is not intended to diminish the importance of any of the therapeutic factors, as they are all are very important to group processes and interpersonal learning.

The mean incidences of each of the six selected factors was examined (see Figure 34). The group of people who had reported a diagnosis of developmental disability were seen to exhibit more mean incidences of the selected factors which can be described as reflecting external expressions of interpersonal learning: Acceptance/Cohesion, Learning Through Interpersonal Action and Development of Social Skills. Those subjects who did not report possession of a diagnosis of developmental disability were seen to exhibit more mean incidences of factors which can be described as reflective of internal components of interpersonal learning: Catharsis, Self-disclosure, and Self-understanding.

The examination of the six factors selected by this author may suggest that each of the two different grouping of people had equally important, but different parts to play in the processes of the integrated group.

Therapeutic Themes

In the post hoc section which explored the co-therapists' interpretation of group themes, affectations, defenses, conflicts and compromises or resolutions it became clear that the integrated groups' major emphases could be compared to well-known and accepted stage theories of group development. For the purposes of the current paper, the interpreted group themes, defenses, conflicts, affectations, and resolutions or compromises will be compared to the stage theory outlined by MacKenzie and Livesley (1983). Trends or characteristics found to be evident in the process evaluations will be inserted if applicable.

The first stage which the authors explain is entitled "Engagement" (MacKenzie & Livesley, 1983, p. 104), which involves universality as a main mechanism for development. MacKenzie and Livesley characterize the Engagement stage as involving gossip and a good deal of accepting cohesion. Any self-disclosure, interpersonal challenge and introspective understanding is said to be superficial. The theme recorded for the first session was not being supported by one's family, the 'system' and work. The compromise was recorded to be to support one another within the group. In the integrated group the first session was observed to have the greatest incidence count of Acceptance/Cohesion, Universality, Vicarious Learning (along with session five), Self-understanding, Self-disclosure, Corrective Recapitulation of the Primary Family, Existential Factors and Imparting of Information. Factors with incidences larger than ten in each session were interpreted as having the greatest incidences.

The HIM-G and GCQ results lend additional support for the integrated group having been in the developmental stage of Engagement in the beginning sessions. For the first session the highest HIM-G Content/Style scores were Topics (I) and Group (II). They both ranged around the seventy-fifth or the eightieth percentile. The Assertive (C) and Speculative (D) Work/Style scores were observed to be the highest scoring HIM-G categories (fiftieth percentile) in this first group with the exception of Confrontative which remained above the ninetieth percentile for all of the evaluated sessions. Quadrant 2 scores were highest as well in the first session. All of the highest HIM-G observed scores in the first session were of the Pre-Work catgories or an exploratory nature. The GCQ Engaged score began in group session one at a high middle level amongst the various raters. The GCQ Conflict score was observed to have the highest range in the first session of all the sessions. This may have indicated a beginning of the next developmental group stage, and/or a competitiveness to be heard within the group.

The second stage which MacKenzie and Livesley (1983) describe in group development is that of "Differentiation" (p. 105). This stage is characterized by the emphasis of individual differences between group members, an increase in assertiveness, conflict, avoiding, anxiety, group emphases and self-revelation. The themes which may fall within the definition of Differentiation are those of group sessions two (not being in control), three (sharing feelings regarding abuse and resolving to voice feelings in the group), four (wanting to be perceived as capable but being fearful about it) and five (not being able to express one's feelings directly and being fearful of the consequences if one does express one's feelings). Anxiety as an affect was present in all sessions listed immediately above except for session three. Fear was recorded as an affect for sessions four and five.

The highest therapeutic factors counted for session five were (not in any order) Acceptance/Cohesion, Learning from Interpersonal Action, Altruism, Self-disclosure, Existential Factors, Imparting of Information, Vicarious Learning (as well as session one), and Development of Social Skills. The incidence of Catharsis was at its highest level attained (which was attained at two other evaluated sessions).

The highest HIM-G scores for group session five were Group (II) and Relationship (IV) which were seen to be between the seventieth and eightieth percentiles, Confrontation (E) which was always high, Conventional (B) and Assertive (C) which were both observed to be around the fiftieth percentile, Quadrant 2 with a percentile score of seventy, and Quadrant 1 which was found to be at the sixtieth percentile. The GCQ Engaged scores were observed to begin an incline at the fifth session and the GCQ Conflict scores commenced a decline (although information from the therapists and the outside observers only is available). The

Avoiding scores of the GCQ seemed to remain at a medium level from the first session to the fifth.

The third developmental stage of group development described by MacKenzie and Livesley (1983) is " Individuation" (p. 107). This stage is said to be characterized by increased interpersonal challenge, production and work, personal focus, risk, self-understanding and engagement. As well, a decrease in focus on the group and conflict may be observed. MacKenzie and Livesley suggest that there may be dependency problems evident at this stage.

The sessions in which the group themes may adhere to the Individuation stage are six (feeling 'stuck' and wanting to be 'unstuck'), seven (being alone), eight (struggling with group acceptance), nine (being controlled by someone else and struggling for one's identity), and ten (being rejected and struggling with the conflict of being dependent versus independent).

The ninth group session evaluated was the one which evidenced the highest HIM-G Quadrant 4 (production) score (seventy-fifth percentile). Confrontation (E) was seen to be at its highest level (which was maintained throughout the remainder of the evaluated sessions). The Assertive (C) Work/Style score was found to increase slightly at session nine to the fifty-fifth percentile. The highest Content/Style HIM-G score was found to be

Relationship (IV) at session nine (eightieth percentile), whereas the Group (II) score was seen to dramatically decline to below the level for the Topics (I) score (sixtieth percentile). The Personal (III) Content/Style score was found to be at its highest observed level of the thirtieth percentile.

The GCQ Engaged score continued to rise at the ninth session and the Conflict and Avoiding scores seemed to continue to decline.

The therapeutic factors interpreted to have the highest counts at the ninth session were (in no particular order) Acceptance/Cohesion, Imparting of Information, Development of Social Skills, Altruism, Installation of Hope, Self-disclosure, and Learning from Interpersonal Action.

The fourth stage of group development described by MacKenzie and Livesley (1983) is entitled "Intimacy" (p. 109). This stage is said to be characterized by a high emphasis on relationships, the 'here and now', risk, and engagement. The authors state that at the beginning of Intimacy, there may be egocentric interactions. They suggest that there are low levels of conflict and members may realize their interpersonal responsibilities in relationships.

The sessions in which the group themes may be said to fall under the stage of Intimacy are eleven (being neglected and rejected by caretakers - but to resolve to begin acknowledging feelings associated with the neglect and rejection), twelve (having been abused and to resolve to recognize the associated feelings), and thirteen ('owning' one's feelings and acting on them in a mature and responsible way).

The GCQ score of Conflict continued to decrease at the thirteenth session and The Engaged score continued to increase. The highest HIM-G scores were found to be Group (II) which was observed at the nintieth percentile, Relationship (IV) which was observed to be at around the seventieth percentile, Confrontive (E), Assertive (C) which was oberved at the sixty-fifth percentile, Quadrant 2 which was found at the eighty-fifth percentile, Quadrant 4 which was seen to be at the seventieth percentile.

The highest incidences of therapeutic factors at the thirteenth group session were observed to be Acceptance/Cohesion, Imparting of Information, Guidance, Learning from Interpersonal Action, Altruism, and Installation of Hope. Catharsis attained its highest incidence at session thirteen (but also at group session five and seventeen).

MacKenzie and Livesley (1983) describe the fifth stage of group development as "Mutuality" (p. 110) in which the focus is upon boundaries around personal autonomy and interpersonal responsibility for others. This stage is said to be characterized by a possible recycling of old content in new ways especially regarding interactional significance. An increased need for trust is probably evident as well as increased levels of conflict in reaction to deeper demands around commitment.

The recorded themes which may be defined under the group development stage of Mutuality are fourteen (dealing with loss and resolving to talk, live together and to give each other advice), fifteen (loss), and sixteen (being taken advantage of). The two major themes of loss and being taken advantage of have had many of their components already covered in previous group sessions. Of note is the fact that no definite compromises or resolutions were found to be present in the latter two sessions mentioned under Mutuality.

No therapeutic counts, HIM-G or GCQ comparisons can be made with the sessions fourteen to sixteen (inclusive) for they were not evaluated in the analyses.

The final stage described by MacKenzie and Livesley (1983) is "Termination" which is characterized by achieving disengagement with the incorporation of the group as a positive and constructive experience, a reviewing of group history, and a final opportunity to try out one's acquired coping skills and to apply one's acquired understanding. Termination is said by MacKenzie and

Livesley to bring up the existential problem of isolation and self-responsibility. The seventeenth and last group session's theme can be said to be defined under the auspices of the Termination stage. The theme dealt with loss. The resolution was to acknowledge one's accomplishments and what one has yet to do.

The highest therapeutic factors counted during the last session were Development of Social Skills, Self-disclosure, Catharsis, Existential Factors, Acceptance/Cohesion, Universality, Altruism, Installation of Hope, Guidance, Imparting of Information, Self-understanding, and Learning from Interpersonal Action.

The GCQ Engaged score was found to reach its highest level at the last session. Conflict attained its lowest level, as did Avoiding.

The dominant HIM-G categories were found to be Group (II), Relationship (IV) (with percentile scores of around eighty), Confrontive (E) (observed to be above the ninetieth percentile again), and Speculative (D) (found with a percentile score of around forty-five). Quadrant 2 (ninetieth percentile) was found to be at a higher level than Quadrant 4 (seventieth percentile).

By a detailed comparison of each of MacKenzie and Livesley's (1983) stages of group development with the evidence compiled within the present study, it can be said with some certainty that the evidence contained herein does suggest that the integrated group had progressed through Engagement, Differentiation, Individuation, Intimacy, Mutuality and Termination.

Suggested Further Research

The two major suggestions which have emerged for the factor count within the integrated group are worthy of further investigation under more rigorous scientific design boundaries which control treatments (drug and group therapies), group membership in diagnosed or not diagnosed populations, methods of counting therapeutic factors, and mediating variables. Questions to be asked may be:

1. Are there trends across time of concentrations of observed incidences of therapeutic factors attributable to membership in groups which do and do not possess a diagnosis of developmental disability in integrated group therapy? Could any trends which may be present have to do with the degree of development of ego defenses? For example, is it possible that people diagnosed with developmental disabilities and who may have less developed ego defense systems than other people do, can further group processes at certain stages?
2. Do the trends of concentrations of incidences of therapeutic factors between the two integrated populations of people

generalize to group therapy which is not integrated?

3. What are the similarities and differences between the concentrations of the highest incidences of therapeutic factors (totals across all sessions and for individual sessions) in diagnosed and not diagnosed groupings of people in both integrated and compared homogeneous group therapies? This could involve either a factor analysis or a qualitative study of the statements interpreted to be examples of different therapeutic factors.

4. How does a study of an integrated group's progression through the developmental stages of group therapy compare with the concentrations of therapeutic factor counts of the total group and broken down into diagnosed and non-diagnosed group members?

There are probably many more questions which could stem from the exploration of therapeutic factors in the current study which the author has not thought of.

A question which may be explored with reference only to stage theories of group development may be: Do the stages of an integrated group's development have any significant characteristics which are specific to an integrated group (regarding focus, tasks, themes, conflicts, and resolutions or compromises)?

Conclusions

The search for evidence of positive change was the purpose of the current exploratory study. Although extremely limited experimentally, the search was intended to find reason for further, more rigorous examinations into integrated group therapy. This author believes that the search was successful. Table 43 summarizes the sixteen hypotheses made and interprets whether or not the results were in line with each hypothesis.

Table 43

Summary of Hypotheses (DD = diagnosis of developmental disability reported, ND = no diagnosis reported)

Hypothesis #	Hypothesis Summary	Were The Results In Line with the Hypothesis?
1	No significant differences attributed to DD or ND will be found in the BSI results.	Yes
2	BSI posttest scores will be significantly lower than the Psychiatric Outpatient Norms, while pretest scores will not.	Yes
3	BSI posttest scores will be significantly lower than Pretest scores.	Yes
4	No significant differences attributed to DD or ND will be found in the SAS-SR outcome results.	Yes
5	SAS-SR posttest scores will not be significantly higher than the Community Sample Norms.	No

(table continues)

Table 43

Summary of Hypotheses (DD = diagnosis of developmental disability reported, ND = no diagnosis reported)

Hypothesis #	Hypothesis Summary	Were The Results In Line with the Hypothesis?
6	SAS-SR posttest scores will be significantly lower than pretest scores.	No
7	No significant differences attributed to DD or ND will be found in the Target Goals results.	Yes
8	The Achievement End-point will be significantly higher than the Achievement Mid-point Target Goals score.	No
9	The Achievement Mid-point will be significantly higher than the Expectations Target Goals score.	No
10	The Achievement End-point will be significantly higher than the Expectations Target Goals score.	Yes
11	Significant differences will be found in the GCQ scores over time.	Yes
12	Significant linear, quadratic and/or cubic trends will be found for the GCQ scores.	Yes
13	Graphical portrayals of HIM-G categories will describe trends from Pre-Work to Work, Non-Member Centred to Member Centred and less risk to more risk.	Yes
14	HIM-G Therapist Activity score will decrease and the Intra-group Ratio and the Risk Ratio will increase.	Yes
15	No significant differences will be found between the HIM-G results and the HIM-G reference data.	No

(table continues)

Table 43

Summary of Hypotheses (DD = diagnosis of developmental disability reported, ND = no diagnosis reported)

Hypothesis #	Hypothesis Summary	Were The Results In Line with the Hypothesis?
16	Upward or downward trends of significant correlations will be found within a matrix composed of the current study's summary scores as they occurred in time.	No

Table 43 shows that 10 out of the 16 hypotheses were found to have results in line with their expectations.

The trends found evident in the current study's results of the GCQ were compared to a study done by MacKenzie, Dies, Coché, Rutan, and Stone (1987) which defined successful groups and groups which were not so successful based upon the Global Outcome Form which had apparently evolved over time and was based upon the American Group Psychotherapy Association (AGPA) Institute Evaluation Form. The GCQ scores of the integrated group and those of the successful groups described by MacKenzie et al. (1987) were found be quite similar. This may lead one to conclude that perhaps the integrated group could be defined as successful if judged by the standards of MacKenzie et al., even though the populations and number of group sessions in the two studies were different.

Characterization using the HIM-G of the integrated group's interactions suggested that the group seemed to be similar to W. F. Hill's 1965 description of Group Analytic interactions, owing to the high scores maintained in the Group, Relationship and Confrontive categories. The Therapist Activity score and the Confrontive score in the HIM-G analyses were the only two scores found to be significantly different than the reference data. (P. Hill, 1964) This author has suggested that, perhaps the use of psychodrama and/or the shared training bases of the co-therapists in psychoanalytic practices may have influenced these HIM-G descriptions. In general it was found that the integrated group moved from Pre-Work HIM-G categories to Work categories, from Non-member centred to Member-centred interactions, and from HIM-G categories of interaction which entail less personal risk to those involving more personal risk. These movements suggest positive growth according to W. F. Hill's (1965) value system.

A post hoc exploration which involved the counting of incidences of fourteen therapeutic factors suggested that the group of people who reported possession of a diagnosis of developmental disability displayed more mean incidences of eleven of the fourteen factors throughout the five group sessions evaluated (sessions one, five, nine, thirteen and seventeen). The therapeutic factor count exploration also suggested that concentrations of the counted factors fluctuated across time between those members who did and did not report possession of a diagnosis of developmental disability. The therapeutic count may have also been influenced by the psychodrama model of group therapy used within the study.

This author has suggested, through examining six therapeutic factors interpreted to be reflective of interpersonal learning, that the two integrated groups of people in the current study may have equally important, but different parts to play in an integrated groups' processes. A split in the six factors was described between external expressions of interpersonal learning exhibited by those who reported a possession of a diagnosis of developmental disability and internal expressions of interpersonal learning by those who did not report such a diagnosis. Whether or not the described split is significant or not is not known. Both groups of people exhibited all types of therapeutic factors.

Of note is the fact that such a split in external and internal processes is a contentious issue within the literature. Many authors support the idea that those with a diagnosis of developmental disability are not as able, for many reasons usually inherent to being given such a diagnosis, of internal processes of interpersonal learning (see Johnson, 1971 and Sternlicht, 1966). Then, often, the generalization is made that people with a diagnosis of developmental disability cannot benefit from therapy. Group therapy is included in this generalization. However, MacKenzie (1990) states that the two components cannot be separated, for they are each parts of the same process. This author believes that the exhibition of more therapeutic factors (as counted within this study) by the group diagnosed with a developmental disability than those without a diagnosis challenges the traditional views that diagnosed people cannot benefit from group therapy. This author also believes that the suggestion of a split within the types of therapeutic factors of interpersonal learning warrants further investigation.

The fact that this study has suggested that there may be a split between the external and external therapeutic factors of interpersonal learning between those diagnosed with a developmental disability and those not so diagnosed does not necessarily lend support to the traditional myths which say that diagnosed people cannot benefit from psychotherapy. The reasons for this can be found within this current study. No outcome results were seen to be split between the two groups. The integrated group was seen to progress positively according to the HIM-G (W. F. Hill,1965) and a comparison made with the study of

MacKenzie, Dies, Coché, Rutan and Stone (1987), as well as the group developmental model of MacKenzie and Livesley (1983).

In addition, this author believes that in order for external exhibitions of interpersonal learning to be evident, internal processes must exist.

Further study in the area of integrated group therapy will be exciting, untravelled ground. Recommendations for future investigations mentioned herein are characterized by the emphasis of attention to experimental rigour as well as qualitative study. The current study has enlightened many questions regarding the possibility that people, both with and without a diagnosis of developmental disability, may benefit from an integrated group therapy model and that both groups may have valuable parts to play in therapeutic group processes.

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Appendix A

CONSENT TO PARTICIPATE IN A RESEARCH STUDY

I, ________________________________ presently attending the Personal Concerns Therapy Group for counselling with Carla Blaine, B. Ed., student clinican, under the supervision of Dr. G. K., psychologist, at the University of Alberta, Department of Educational Psychology, give my permission to participate in sessions which are viewed behind one-way glass.

I understand that these sessions may be audio or videotaped and used for research purposes, and consent to such taping and use.

I understand that the purpose of the research is to determine the benefit of the group therapy for me and the other members of the group.

I also understand that my identity will be kept confidential within the research and that any tapes made will be destroyed after the research project is finished and will not be used in the future.

NOTE: I understand that I may cancel consent to view, tape or use such tapings or viewings for research purposes at any time. I also understand that I may cancel my participation in the group sessions and the research study as a whole at any time. I understand that each time I attend a group session, I must verbally give my permission to participate in this research study as defined above.

....
signature date

....
signature of parent/guardian if date
appropriate

Address..........................
....
....
Witness

Appendix B

CONSENT TO TESTING FOR RESEARCH PURPOSES

I, ___________________________________ who have agreed to attend the Personal Concerns Therapy Group for counselling with Carla Blaine, B. Ed., student clinician, under the supervision of Dr. G. K., psychologist, at the University of Alberta, give my permission to participate in testing procedures before, during and after the group program for research purposes.

I understand that the purpose of the research is to determine the benefit of the group therapy for me and the other members of the group. I also understand that my identity will be kept confidential within the research and that any tests completed by myself will be destroyed after the research project is finished.

Note: I understand that I may cancel my participation in the group sessions, the research study as a whole, my consent to complete tests, and consent for the researcher to use the information provided therein for research purposes at any time. I also understand that each time that I attend a group or testing session, I must verbally give my consent to participate in the tests defined herein for research purposes.

The tests for which I give my consent to participate in for the research purposes outlined above are:

....

....

....

signature date

....

signature of parent/guardian if appropriate date

Address..........................

....

....

witness

Appendix C

CONSENT FOR VIDEO TAPING OF GROUP SESSION FOR RESEARCH PURPOSES

I, ______________________________________ currently attending a personal development seminar with Dr. P. K., give my consent for Carla Blaine, MEd. counselling psychology student, (########), supervised by Dr. G. K., professor, Department of Educational Psychology, ########, to view and video tape the seminar session taking place Wednesday, September 16, 1992 at 12:00 noon in room 5-112.

I understand that the video tape will only be used to establish interrater reliability for the rating scales: Hill Interaction Matrix - Group Form, and the Group Climate Questionnaire - Short Form among two raters for each scale. The interrater reliability will be utilized for Carla Blaine's master's thesis work in counselling psychology.

I understand that Carla Blaine will be viewing the seminar session only in order to operate the video controls.

I understand that the information contained on the video tape of today will not be used for any other purpose other than is outlined above. I also understand that once the data from the video tape of today is analyzed, and interrater reliability is established from the said data, the video tape will be erased.

I also understand that my identity will be kept confidential.

I understand that if I have any questions regarding the video taping or this consent form, I may contact Carla Blaine or Dr. G. K. at the phone numbers given above.

....

______________________________	______________________________
Signature	Date
______________________________	______________________________
	Witness
______________________________	______________________________
______________________________	______________________________
Address	
	______________________________
	Address and Phone Number

Appendix D

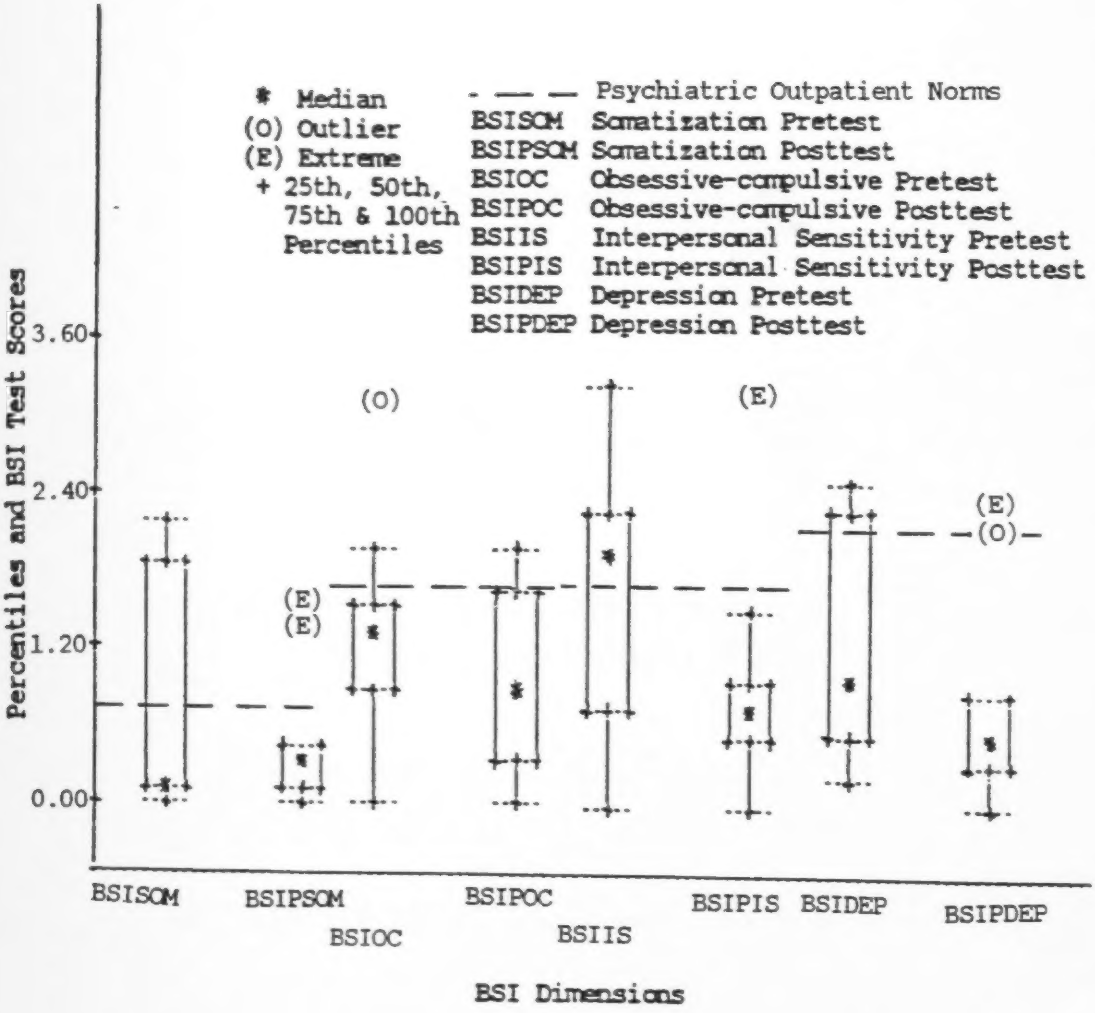

Figure D-1. Percentile and median differences in a box and whisker plot for the BSI scores of Somatization, Obsessive-compulsive, Interpersonal Sensitivity and Depression with Psychiatric Outpatient Norms.

Appendix E

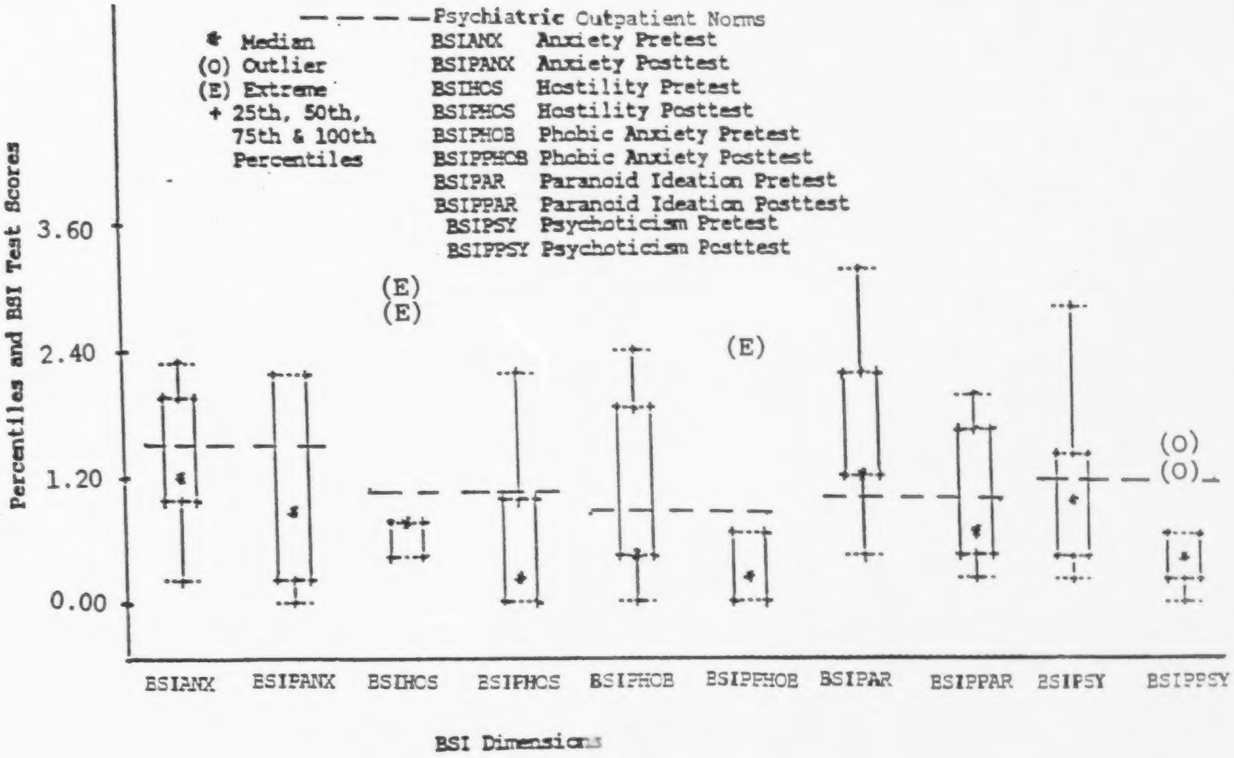

Figure E-1. Percentile and median differences in a box and whisker plot for the BSI scores of Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation and Psychoticism with Psychiatric Outpatient Norms.

Appendix F

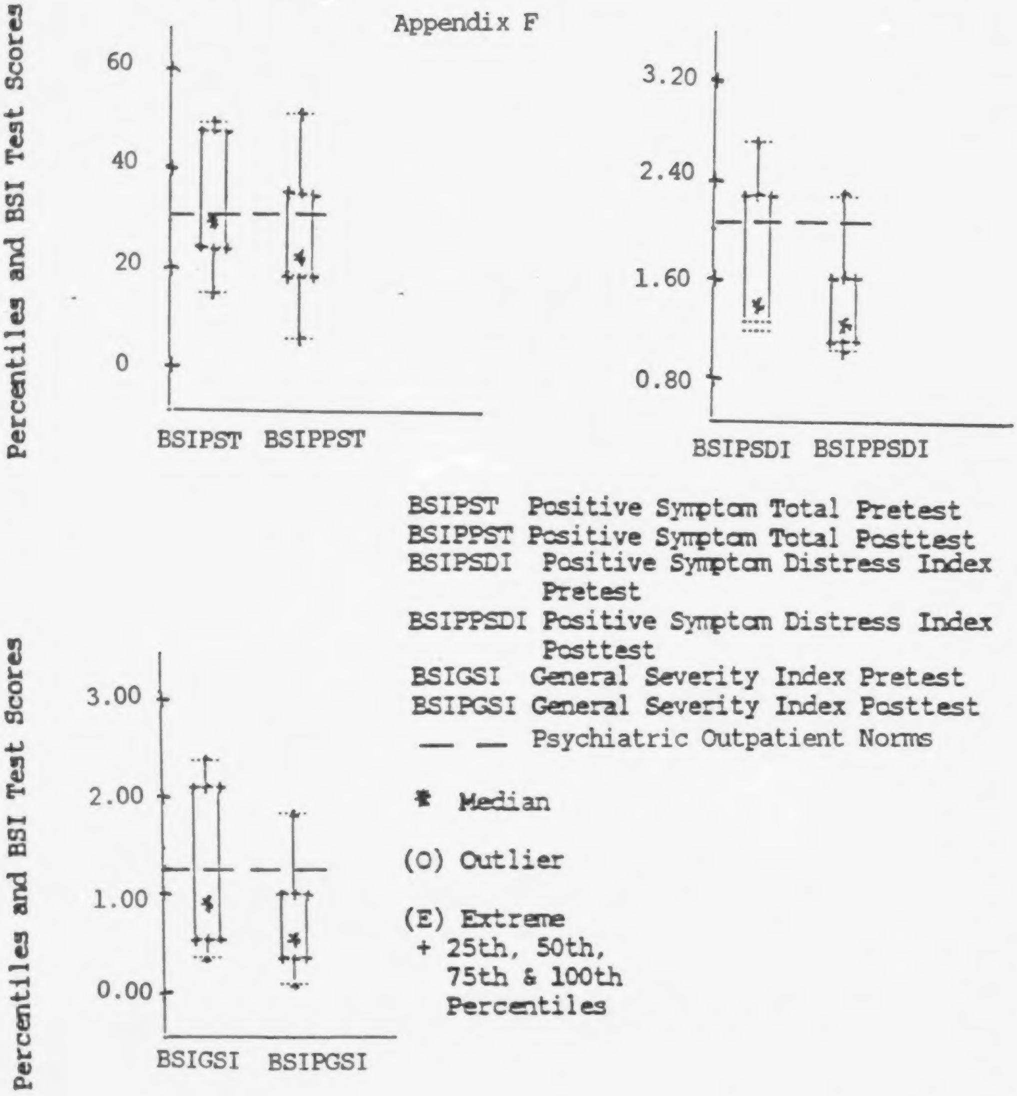

Figure F-1. Percentile and median differences in box and whisker plots for the BSI scores of the General Severity Index, the Positive Symptom Total and the Positive Symptom Distress Index with Psychiatric Outpatient Norms.

Appendix G

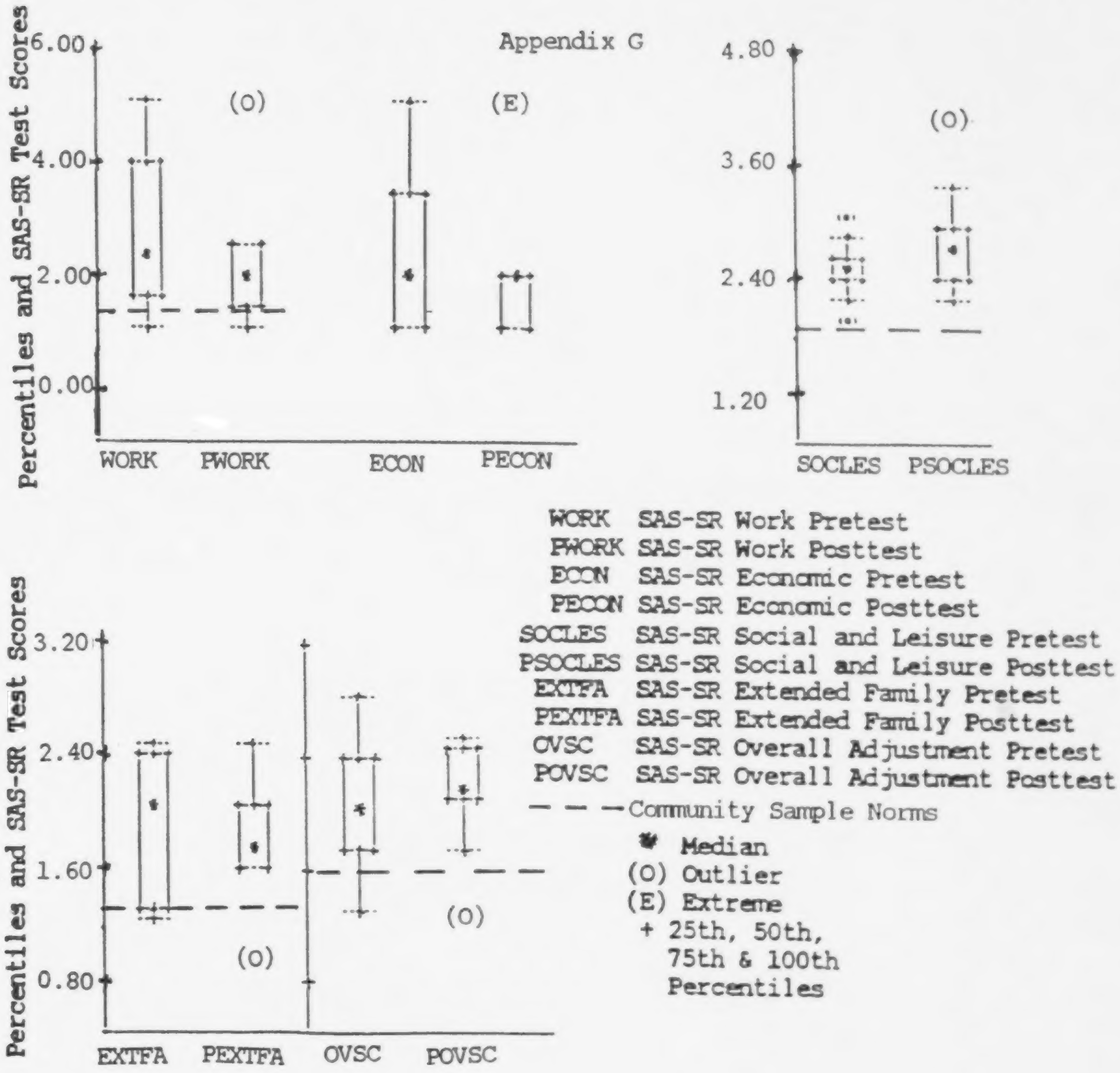

Figure G-1. Percentile and median differences in box and whisker plots for the SAS-SR scores of Work, Economic, Social and Leisure, Extended Family and Overall Adjustment Score with Community Sample Norms.

Appendix H

GCQ 'Engaged' Rating Scores

Type Of	Rater	Rating Times				
Rater	Number	Sess. 1	Sess. 5	Sess. 9	Sess. 13	Sess. 17
Leader	1	3.60	2.80	4.60	4.20	4.40
	2	2.60	3.40	4.60	4.40	4.00
Observer	1	3.40	3.60	4.20	4.80	4.60
	2	3.20	2.80	4.00	3.00	3.40
Group	2	3.60	--	4.60	4.20	5.00
Member:	4	2.40	--	3.40	4.00	4.00
No Diag.	5	4.20	--	5.00	--	5.00
	7	3.20	--	--	--	--
	10	5.00	--	4.20	5.60	6.00
Group	3	5.75	--	5.00	6.00	6.00
Member:	6	2.80	--	--	2.50	--
Diag.	8	5.00	--	4.20	3.20	5.40
	9	3.50	--	4.00	5.60	4.60

Note. No group members completed the GCQ-S for Group 5 (indicated by '--'). Other indications of '--' delineate times when group members were absent from evaluated groups. Sess. = Group session. No Diag. = Group Members who did not report possession of a diagnosis of developmental disability. Diag. = Group Members who did report possession of a diagnosis of developmental disability.

Appendix I

GCQ 'Conflict' Rating Scores

Type Of	Rater	Rating Times				
Rater	Number	Sess. 1	Sess. 5	Sess. 9	Sess. 13	Sess. 17
Leader	1	2.25	1.50	0.25	1.75	0.75
	2	2.60	2.75	1.25	2.25	1.25
Observer	1	2.25	1.25	1.50	1.75	0.75
	2	1.00	1.00	0.50	1.25	1.25
Group	2	1.50	--	2.00	1.50	0.75
Member:	4	2.50	--	2.00	2.25	1.00
No Diag.	5	1.00	--	1.25	--	1.50
	7	3.25	--	--	--	--
	10	3.25	--	2.25	2.00	0.50
Group	3	4.75	--	5.00	2.25	2.25
Member:	6	2.25	--	--	3.50	--
Diag.	8	0.75	--	1.25	0.75	0.00
	9	0.50	--	0.75	0.50	1.25

Note. No group members completed the GCQ-S for Group 5 (indicated by '--'). Other indications of '--' delineate times when group members were absent from evaluated groups. Sess. = Group Session. No Diag. = Group Members who did not report possession of a diagnosis of developmental disability. Diag. = Group Members who did report possession of a diagnosis of developmental disability.

Appendix J

GCQ 'Avoidance' Rating Scores

Type Of	Rater	Rating Times				
Rater	Number	Sess. 1	Sess. 5	Sess. 9	Sess. 13	Sess. 17
Leader	1	2.00	1.66	1.66	2.00	2.66
	2	2.60	2.66	2.00	2.66	2.66
Observer	1	4.33	3.66	3.66	2.33	2.00
	2	1.66	3.00	1.66	2.33	2.00
Group Member: No Diag.	2	2.00	--	1.33	1.33	1.00
	4	4.33	--	3.67	3.00	3.00
	5	2.67	--	3.33	--	3.33
	7	4.00	--	--	--	--
	10	3.67	--	4.00	1.33	0.67
Group Member: Diag.	3	4.00	--	5.00	4.00	2.67
	6	1.33	--	--	1.67	--
	8	0.67	--	2.00	2.00	0.00
	9	4.00	--	2.33	5.67	2.00

Note. No group members completed the GCQ-S for Group 5 (indicated by '--'). Other indications of '--' delineate times when group members were absent from evaluated groups. Sess. = Group Session. No Diag. = Group Members who did not report possession of a diagnosis of developmental disability. Diag. = Group Members who did report possession of a diagnosis of developmental disability.

Appendix K

Absenteeism of Group Members in Therapy Sessions

# Absent		
Diagnosis Reported?		Session #
Yes	No	
0	0	1
1	1	5
2	0	9
1.5	1	13
2	1	17

Appendix L

Summary of Co-therapy Evaluation

The following evaluation summary is extracted from notes taken at the formal co-therapist evaluation meeting.

The co-therapists felt that they had entered the group with somewhat similar training and philosophies about group work. They both were initiated into group therapy at the same place of employment - one as a teacher, the other as a child care worker in a therapist positio in a therapeutic environment for adolescents, children and their families. One had exposure to psychodrama techniques and the other had extensive experience in working with people who had been labelled with diagnoses of various physical and developmental disabilities. The base of their initial training in group therapy was a psycho-analytic one in mostly non-directive groups.

In the early group sessions, both therapists agreed that their use of the Interactive-behavioral model seemed forced and imposed. In the later sessions it seemed as if the group as a whole found its way in the model and both therapists reported that they also felt more comfortable at this time in using it.

As the group developed, the co-therapists reported feeling that they were functioning on the same 'wave length'. The phenomenon which was most telling regarding this conclusion was the experience of hearing the other therapist say what one was about to say within the group on numerous occassions, or one selecting a particular person in the group as a possible protagonist in an enactment - someone which the other therapist was thinking of selecting, or both therapists suggesting the same kind of enactment in a certain situation.

Because of time restraints, the therapists reported not sufficiently discussing their own processes with each other (as co-therapists, feelings, impressions, and problems). They recommended finding a regular time for this procedure which is separate from the recording of case notes and group reviews, even if time restraints like job commitments make it difficult. The author stated that her trust in her co-therapist carried her through many occassions where a formal process meeting may have been helpful. The co-therapists agreed that the greatest obstacle which could have been processed more was their use of the Interactive-behavioral model in order to explore how to use one's strengths, style, and awareness for amelioration of weaknesses. The two therapists reported feeling that if this obstacle could have been formally and regularly processed that their use of the model could have become more flowing and natural earlier.

C. H. asserted that a regular time to process the co-therapy relationship may have stimulated more direct communication between the two therapists regarding timidness of self assertion in the group, especially in the beginning stages of the group sessions. For example, issues such as what to do if one feels that the other therapist is off track could have been explored in more depth. The co-therapists seemed to agree that what C. H. described may have been due to being new to working directly together combined with their lack of regular debriefing of their on-going therapeutic relationship. They agreed that this combination led to both therapists feeling hesitant to direct one another in the group if an incident such as the example given above arose.

In addition, the co-therapists agreed that more observers and occassions for critical feedback immediately following groups would have been very helpful. They also agreed that viewing the video-tapes together following each group, or at least periodically, would have been an excellent use of an available and rich resource. This resource was not made use of because of time restraints.

The therapists described their use of interpretations in the groups as given in the form of questions (which could be challenged by group members) rather than in the traditional statement form. The two group leaders described their effectiveness and skill with the Interactive-behavioral model and the group as a whole as definitely improving as time went by.

This was demonstrated, they said, by the fact that the process of doubling and role-play was more spontaneously accomplished by the group as the sessions wore on - and in a more flowing and relevant manner.

Despite the many improvements which could have been assumed, and were not, for one reason or another - the therapists seemed to agree that their conceptualization of their co-therapy relationship was a developmental one for each therapist as an individual and as a member of a team.